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\* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 Feb 24 PCTGEN now available on STN  
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NEWS 6 Feb 26 PCTFULL now contains images  
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NEWS 8 Mar 24 PATDPAFULL now available on STN  
NEWS 9 Mar 24 Additional information for trade-named substances without structures available in REGISTRY  
NEWS 10 Apr 11 Display formats in DGENE enhanced  
NEWS 11 Apr 14 MEDLINE Reload  
NEWS 12 Apr 17 Polymer searching in REGISTRY enhanced  
NEWS 13 Jun 13 Indexing from 1947 to 1956 added to records in CA/CAPLUS  
NEWS 14 Apr 21 New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX  
NEWS 15 Apr 28 RDISCLOSURE now available on STN  
NEWS 16 May 05 Pharmacokinetic information and systematic chemical names added to PHAR  
NEWS 17 May 15 MEDLINE file segment of TOXCENTER reloaded  
NEWS 18 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated  
NEWS 19 May 19 Simultaneous left and right truncation added to WSCA  
NEWS 20 May 19 RAPRA enhanced with new search field, simultaneous left and right truncation  
NEWS 21 Jun 06 Simultaneous left and right truncation added to CBNB  
NEWS 22 Jun 06 PASCAL enhanced with additional data  
NEWS 23 Jun 20 2003 edition of the FSTA Thesaurus is now available  
NEWS 24 Jun 25 HSDB has been reloaded  
NEWS 25 Jul 16 Data from 1960-1976 added to RDISCLOSURE  
NEWS 26 Jul 21 Identification of STN records implemented  
NEWS 27 Jul 21 Polymer class term count added to REGISTRY  
NEWS 28 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 29 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
  
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 10:16:08 ON 13 AUG 2003

=> FIL REGISTRY COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:16:22 ON 13 AUG 2003  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6  
DICTIONARY FILE UPDATES: 12 AUG 2003 HIGHEST RN 565411-31-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

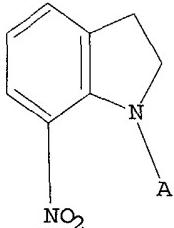
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>  
Uploading 09936975.str

L1 STRUCTURE uploaded

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

13/08/2003 Page 3 10:20 <golam shameen 08/13/2003

SAMPLE SEARCH INITIATED 10:16:40 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS 9 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1248 TO 2392  
PROJECTED ANSWERS: 9 TO 360

L2 9 SEA SSS SAM L1

=> s l1 sss full  
FULL SEARCH INITIATED 10:16:47 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1852 TO ITERATE

100.0% PROCESSED 1852 ITERATIONS 158 ANSWERS  
SEARCH TIME: 00.00.01

L3 158 SEA SSS FUL L1

=> s l3  
SAMPLE SEARCH INITIATED 10:16:51 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 91 TO ITERATE

100.0% PROCESSED 91 ITERATIONS 9 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1248 TO 2392  
PROJECTED ANSWERS: 9 TO 360

L4 9 SEA SSS SAM L1

=> FIL CAPLUS  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
SESSION  
FULL ESTIMATED COST 148.15 148.36

FILE 'CAPLUS' ENTERED AT 10:16:58 ON 13 AUG 2003  
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FILE COVERS 1907 - 13 Aug 2003 VOL 139 ISS 7  
FILE LAST UPDATED: 12 Aug 2003 (20030812/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13  
L5

74 L3

=> s 15 and amino(w)acid?

939778 AMINO  
43 AMINOS  
939796 AMINO

(AMINO OR AMINOS)

4337168 ACID?

591117 AMINO (W) ACID?

L6 12 L5 AND AMINO (W) ACID?

=> s 16 and glycine

127931 GLYCINE  
1650 GLYCINES  
128626 GLYCINE

(GLYCINE OR GLYCINES)

L7 4 L6 AND GLYCINE

=> s 16 and GABA

33619 GABA  
11 GABAS  
33622 GABA

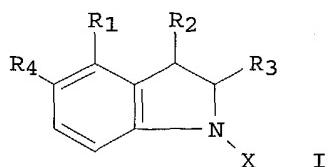
(GABA OR GABAS)

L8 3 L6 AND GABA

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:814100 CAPLUS  
DOCUMENT NUMBER: 137:325331  
TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties  
INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George  
PATENT ASSIGNEE(S): MEDICAL Research Council, UK  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083639	A1	20021024	WO 2002-GB971	20020308
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			GB 2001-9093	A 20010411
OTHER SOURCE(S):			CASREACT 137:325331; MARPAT 137:325331	
GI				



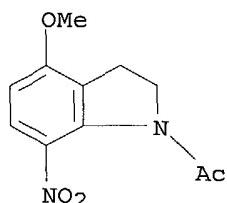
AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl<sub>4</sub> to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 295325-60-9 CAPLUS

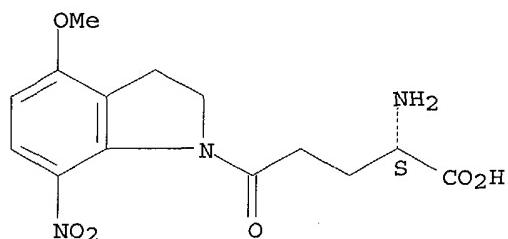
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

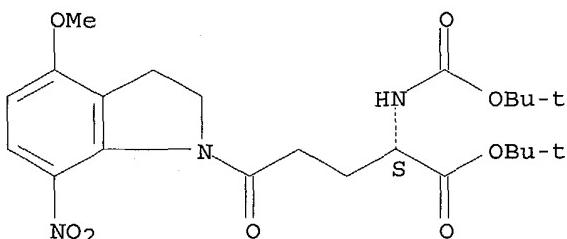


IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and

acetic anhydride)  
RN 444189-55-3 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-  
2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester,  
(.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2001:759359 CAPLUS  
DOCUMENT NUMBER: 136:210906  
TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters  
AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.  
CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK  
SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42  
CODEN: JNMEDT; ISSN: 0165-0270  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Reagents capable of rapid and efficient release of neuroactive amino acids (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI)-caged and 4-methoxy-7-nitroindolinyl (MNI)-caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time  $t_{1/2}$   $\approx$  0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABA<sub>A</sub> receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

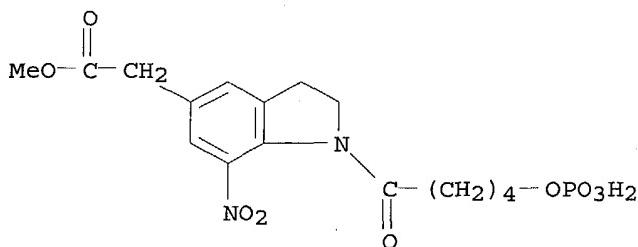
IT 239135-33-2 239135-34-3 295325-62-1  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

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(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

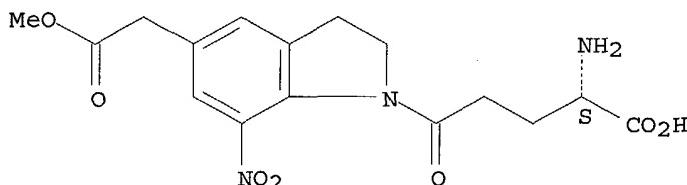
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

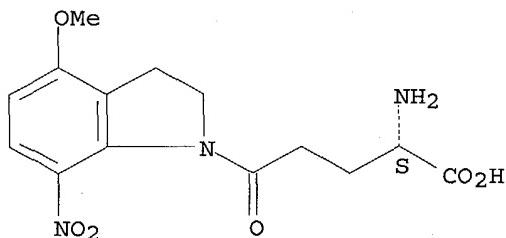
Absolute stereochemistry.



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



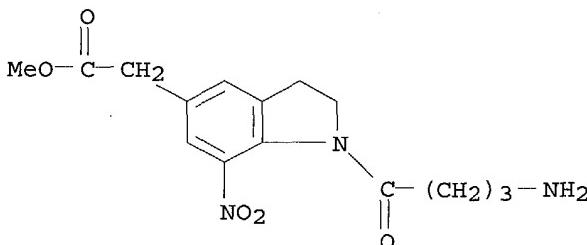
IT 295325-58-5P 402470-76-2P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS

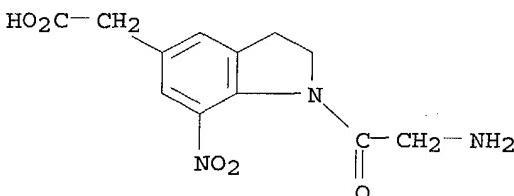
13/08/2003 Page 8 10:20 <golam shameen 08/13/2003

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 402470-76-2 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:666708 CAPLUS

DOCUMENT NUMBER: 133:252301

TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties.

INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George

PATENT ASSIGNEE(S): Medical Research Council, UK

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

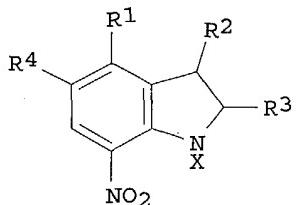
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

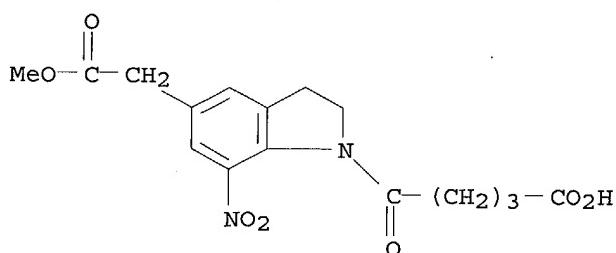
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055133	A1	20000921	WO 2000-GB1039	20000320
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1161418	A1	20011212	EP 2000-911095	20000320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, FI  
 JP 2002539196 T2 20021119 JP 2000-605564 20000320  
 PRIORITY APPN. INFO.: GB 1999-6192 A 19990318  
 WO 2000-GB1039 W 20000320  
 OTHER SOURCE(S) : MARPAT 133:252301  
 GI

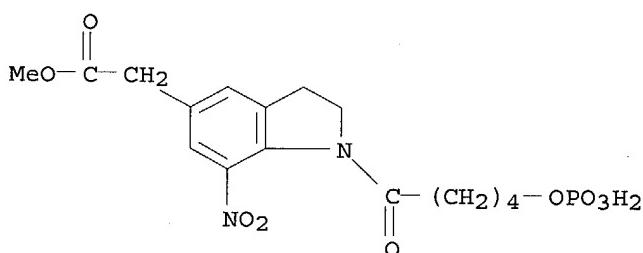


- AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH<sub>2</sub>)<sub>n</sub>Y; N(COZ)(CH<sub>2</sub>)<sub>m</sub>Y, N[(CH<sub>2</sub>)<sub>m</sub>Y<sub>1</sub>] [(CH<sub>2</sub>)<sub>n</sub>Y]; R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y<sub>1</sub> = H, CO<sub>2</sub>H, salts thereof, OPO<sub>3</sub><sup>2-</sup>; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradn., typically by flash irradn. with UV light, were prepd. I can be used to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO<sub>3</sub> in CF<sub>3</sub>CO<sub>2</sub>H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolysis recovery of **GABA** was 88%.
- IT 239135-32-1P 239135-33-2P 239135-34-3P  
 239135-39-8P 295325-58-5P 295325-59-6P  
 295325-60-9P 295325-61-0P 295325-62-1P  
 295325-63-2P 295325-64-3P 295325-65-4P  
 295325-66-5P 295325-67-6P 295325-68-7P  
 295325-69-8P 295325-72-3P 295325-74-5P  
 295325-75-6P 295325-77-8P 295325-78-9P  
 295325-98-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)
- RN 239135-32-1 CAPLUS
- CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 239135-33-2 CAPLUS

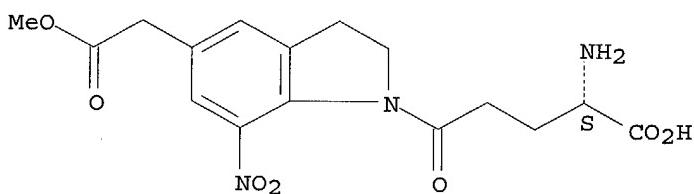
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

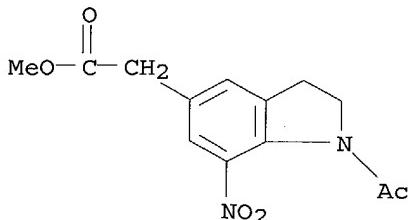
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI)  
(CA INDEX NAME)

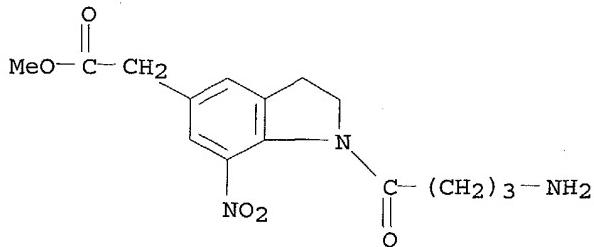


RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-,

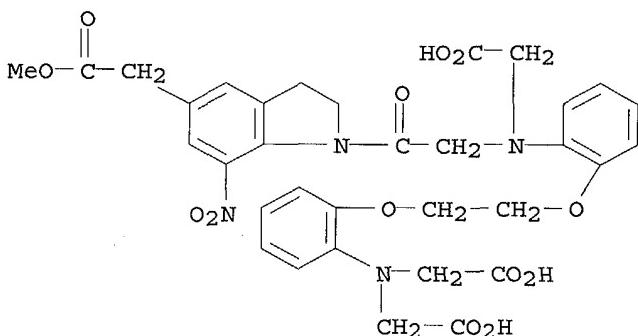
13/08/2003 Page 11 10:20 <golam shamee 08/13/2003

methyl ester (9CI) (CA INDEX NAME)



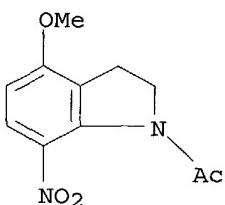
RN 295325-59-6 CAPLUS

CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



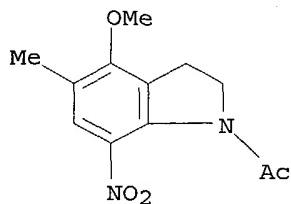
RN 295325-60-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



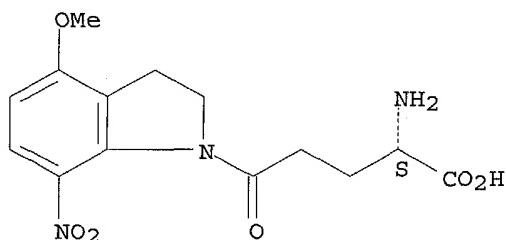
RN 295325-61-0 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

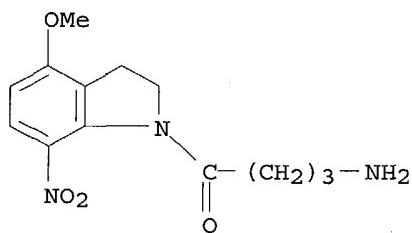


RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

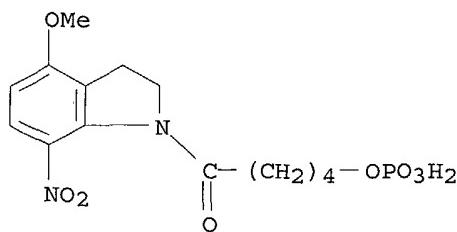
Absolute stereochemistry.



RN 295325-63-2 CAPLUS  
CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI)  
(CA INDEX NAME)



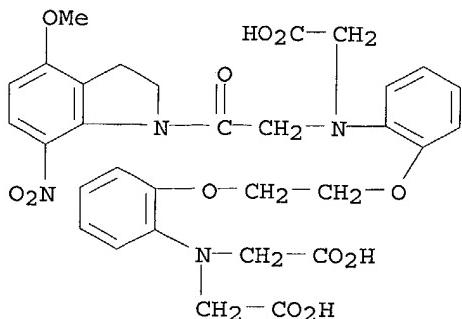
RN 295325-64-3 CAPLUS  
CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-65-4 CAPLUS  
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA

13/08/2003 Page 13 10:20 <golam shamee 08/13/2003

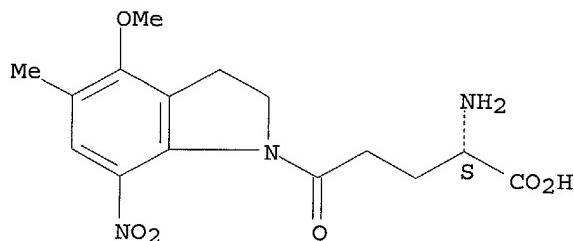
INDEX NAME)



RN 295325-66-5 CAPLUS

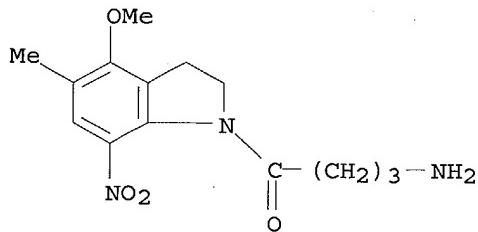
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



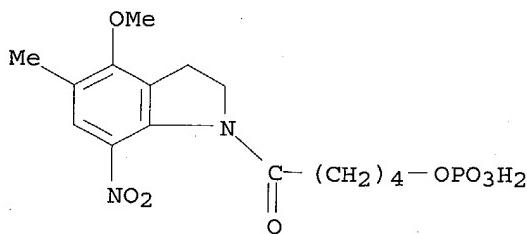
RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-  
(9CI) (CA INDEX NAME)

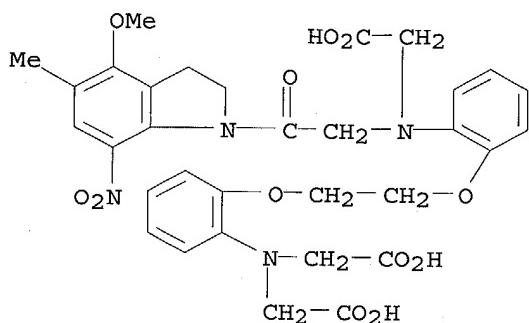


RN 295325-68-7 CAPLUS

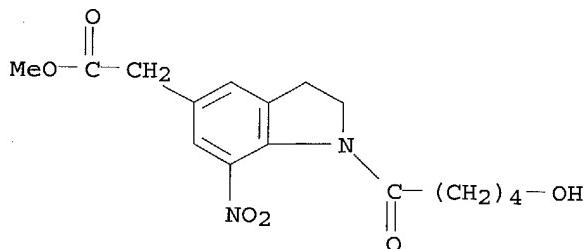
CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl] - (9CI) (CA INDEX NAME)



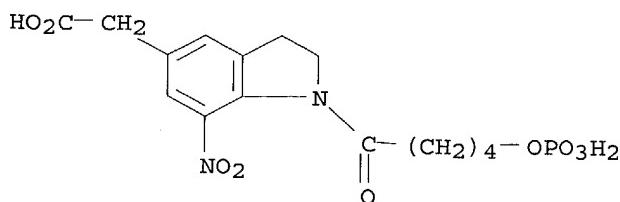
RN 295325-69-8 CAPLUS  
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxyphenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (CA INDEX NAME)



RN 295325-72-3 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

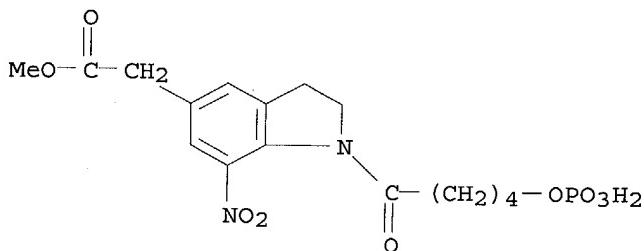


RN 295325-74-5 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



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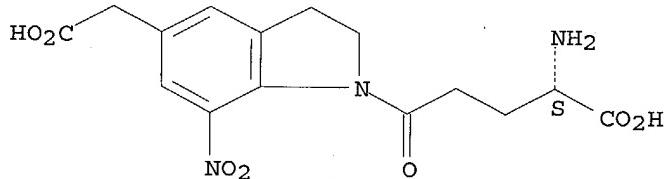
RN 295325-75-6 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 295325-77-8 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

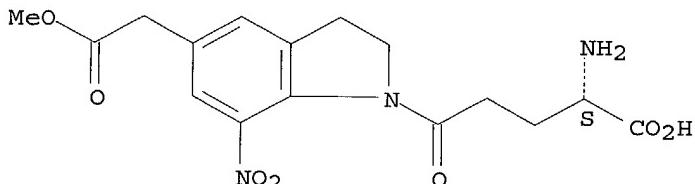
Absolute stereochemistry.



●2 Na

RN 295325-78-9 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

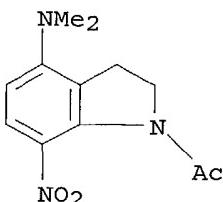


Na

RN 295325-98-3 CAPLUS

13/08/2003 Page 16 10:20 <golam shamee 08/13/2003

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

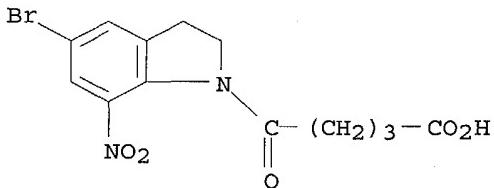


IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

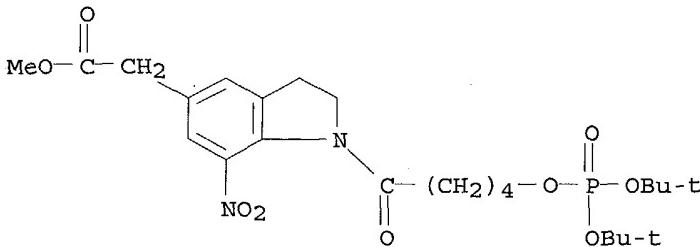
RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI)  
(CA INDEX NAME)



RN 295325-73-4 CAPLUS

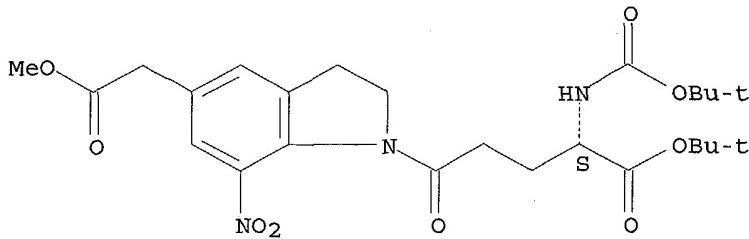
CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphoryl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

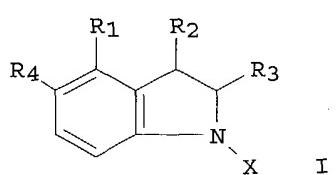


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:814100 CAPLUS  
 DOCUMENT NUMBER: 137:325331  
 TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties  
 INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George  
 PATENT ASSIGNEE(S): Medical Research Council, UK  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083639	A1	20021024	WO 2002-GB971	20020308
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			GB 2001-9093	A 20010411
OTHER SOURCE(S):			CASREACT 137:325331; MARPAT 137:325331	
GI				



AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and

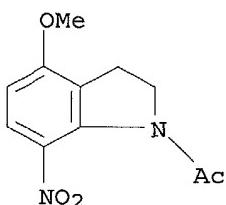
R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CCl<sub>4</sub> to give, among other products, 43% 1-{[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl}-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.

IT 295325-60-9P 295325-62-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 295325-60-9 CAPPLUS

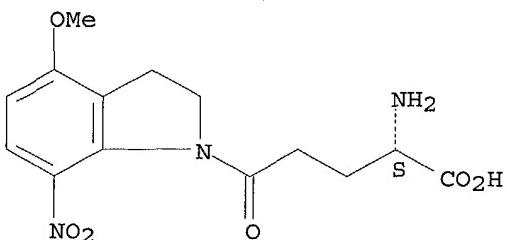
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



RN 295325-62-1 CAPPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



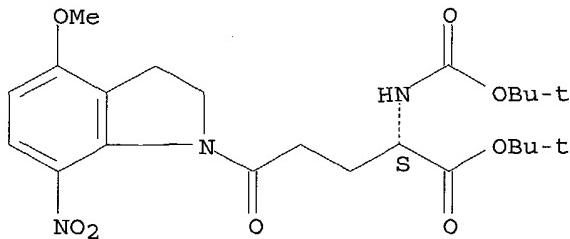
IT 444189-55-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and acetic anhydride)

RN 444189-55-3 CAPPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:759359 CAPLUS

DOCUMENT NUMBER: 136:210906

TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters

AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK

SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42 CODEN: JNMEDT; ISSN: 0165-0270

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

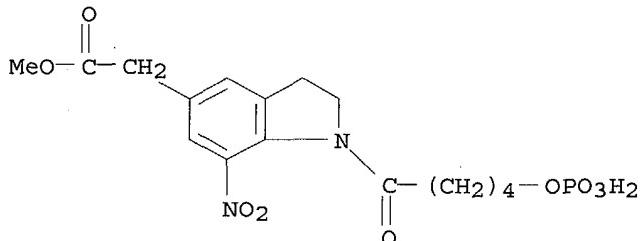
AB Reagents capable of rapid and efficient release of neuroactive amino acids (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI)-caged and 4-methoxy-7-nitroindolinyl (MNI)-caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time.1toreq.0.26 ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

IT 239135-33-2 239135-34-3 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic transmission)

RN 239135-33-2 CAPLUS

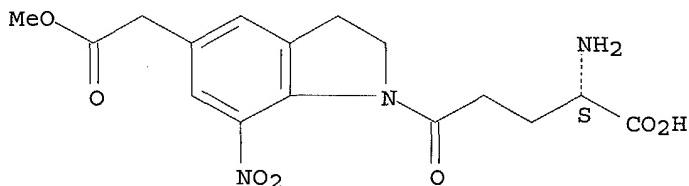
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

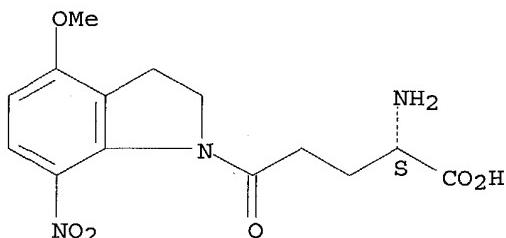
Absolute stereochemistry.



RN 295325-62-1 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

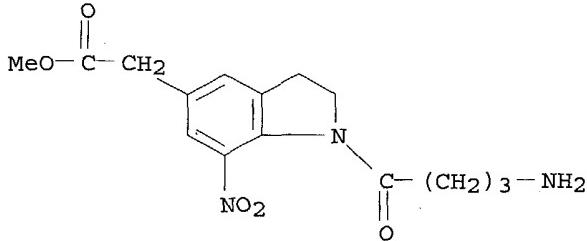


IT 295325-58-5P 402470-76-2P

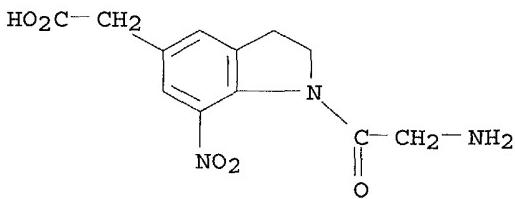
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 402470-76-2 CAPLUS  
 CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

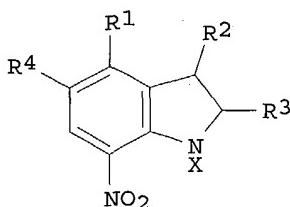
L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2000:666708 CAPLUS  
 DOCUMENT NUMBER: 133:252301  
 TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photocleavable precursors for release of bioactive effector moieties.  
 INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George  
 PATENT ASSIGNEE(S): Medical Research Council, UK  
 SOURCE: PCT Int. Appl., 70 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055133	A1	20000921	WO 2000-GB1039	20000320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1161418	A1	20011212	EP 2000-911095	20000320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002539196	T2	20021119	JP 2000-605564	20000320
PRIORITY APPLN. INFO.:			GB 1999-6192	A 19990318

OTHER SOURCE(S) :

MARPAT 133:252301

GI



**AB** Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH<sub>2</sub>)<sub>n</sub>Y; N(COZ)(CH<sub>2</sub>)<sub>m</sub>Y, N[(CH<sub>2</sub>)<sub>m</sub>Y][C(CH<sub>2</sub>)<sub>n</sub>Y]; R2, R3 = H, (substituted) alkyl; R2R3 = cycloalkyl; m, n = 1-10; Y, Y1 = H, CO<sub>2</sub>H, salts thereof, OPO<sub>3</sub>2-; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradn., typically by flash irradn. with UV light, were prep'd. I can be used to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO<sub>3</sub> in CF<sub>3</sub>CO<sub>2</sub>H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolysis recovery of GABA was 88%.

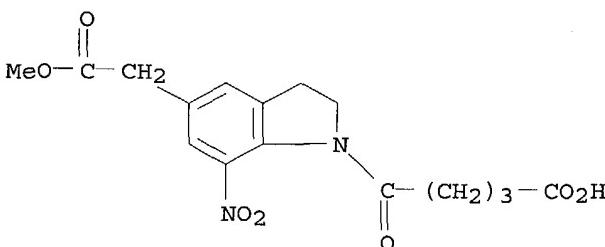
**IT**

239135-32-1P 239135-33-2P 239135-34-3P  
 239135-39-8P 295325-58-5P 295325-59-6P  
 295325-60-9P 295325-61-0P 295325-62-1P  
 295325-63-2P 295325-64-3P 295325-65-4P  
 295325-66-5P 295325-67-6P 295325-68-7P  
 295325-69-8P 295325-72-3P 295325-74-5P  
 295325-75-6P 295325-77-8P 295325-78-9P  
 295325-98-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

**RN** 239135-32-1 CAPLUS

**CN** 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

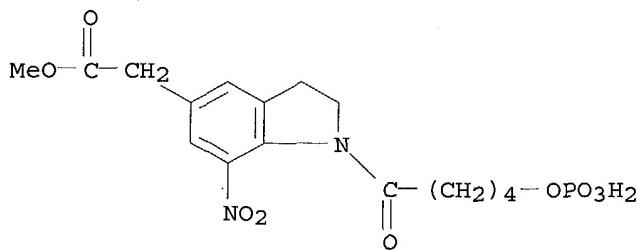


**RN** 239135-33-2 CAPLUS

**CN** 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-

13/08/2003 Page 23 10:20 <golam shamee 08/13/2003

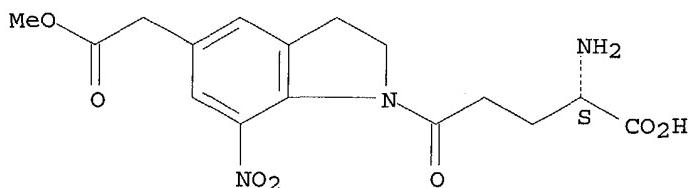
(phosphonooxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

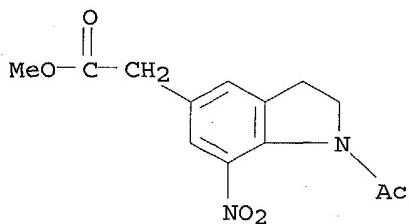
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



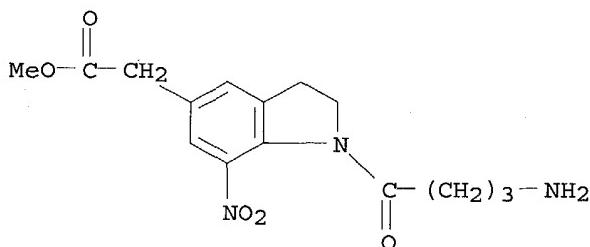
RN 239135-39-8 CAPLUS

CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



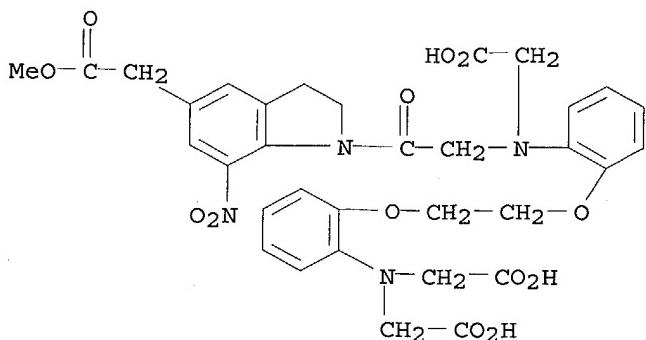
RN 295325-58-5 CAPLUS

CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

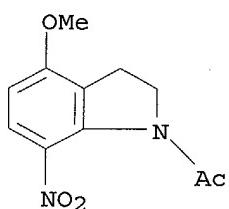


13/08/2003 Page 24 10:20 <golam shamee 08/13/2003

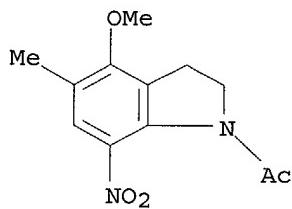
RN 295325-59-6 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-,  
.alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 295325-60-9 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

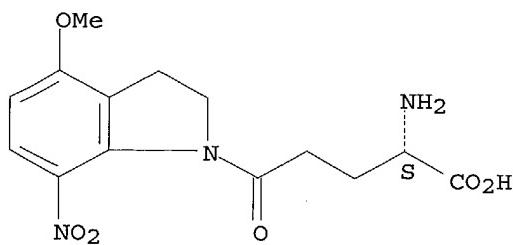


RN 295325-61-0 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



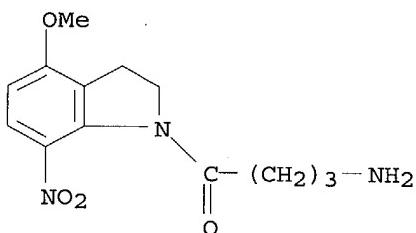
RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.



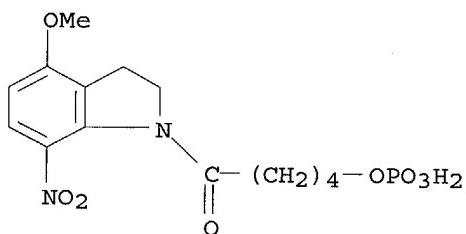
RN 295325-63-2 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI)  
(CA INDEX NAME)



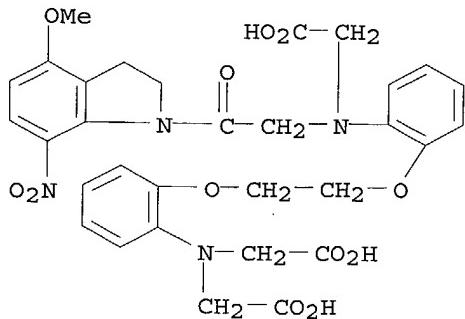
RN 295325-64-3 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-65-4 CAPLUS

CN Glycine, N-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

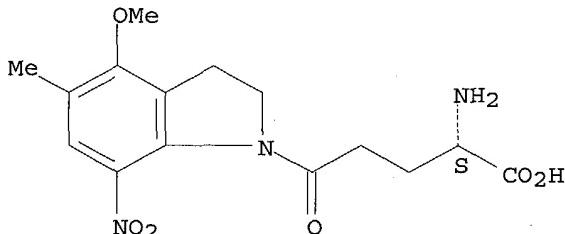


13/08/2003 Page 26 10:20 <golam shamee 08/13/2003

RN 295325-66-5 CAPLUS

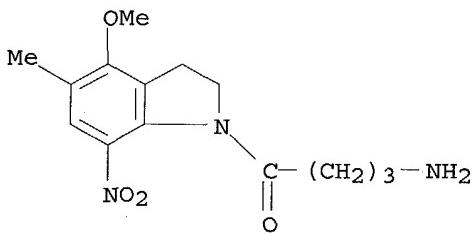
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



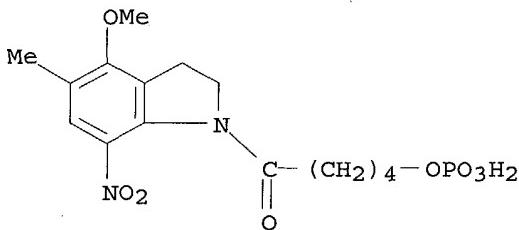
RN 295325-67-6 CAPLUS

CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)



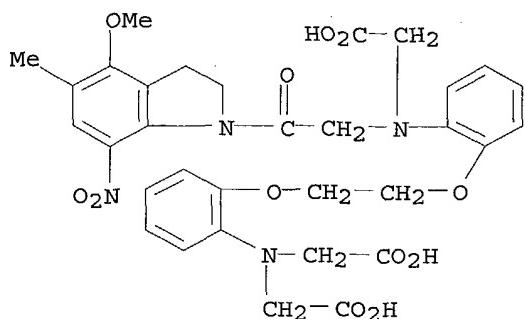
RN 295325-68-7 CAPLUS

CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)

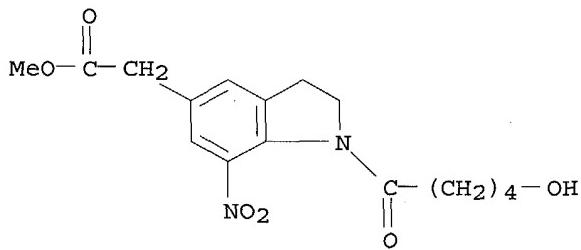


RN 295325-69-8 CAPLUS

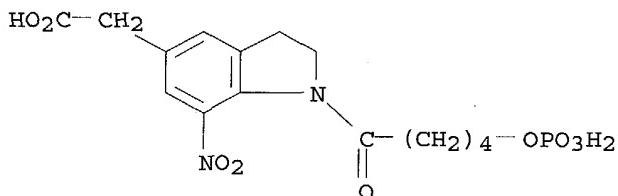
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



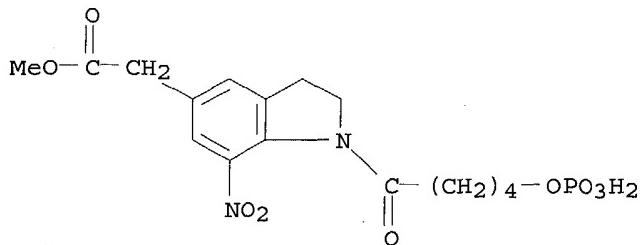
RN 295325-72-3 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-,  
methyl ester (9CI) (CA INDEX NAME)



RN 295325-74-5 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]- (9CI) (CA INDEX NAME)



RN 295325-75-6 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)

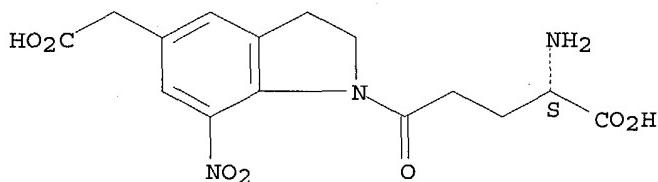


●2 Na

RN 295325-77-8 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

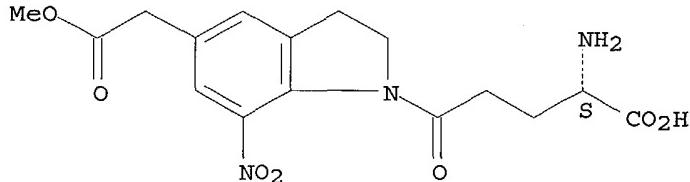


●2 Na

RN 295325-78-9 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

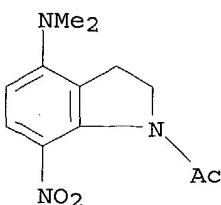
Absolute stereochemistry.



● Na

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

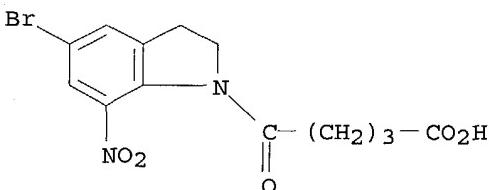


IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

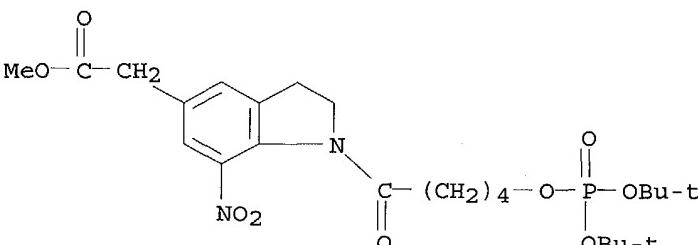
RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI)  
(CA INDEX NAME)



RN 295325-73-4 CAPLUS

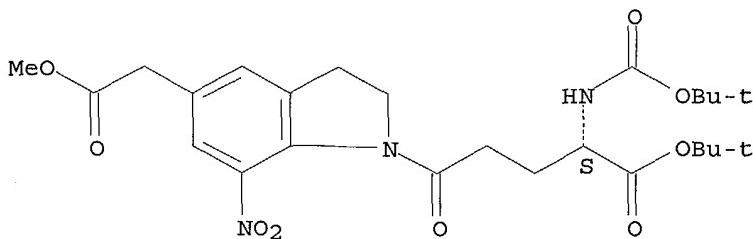
CN 1H-Indole-5-acetic acid, 1-[5-[(1,1-dimethylethoxy)phosphoryloxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-[(1,1-dimethylethoxy)carbonylamino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

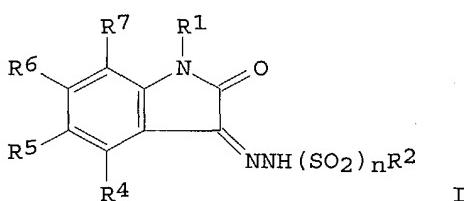
Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:633851 CAPLUS  
 DOCUMENT NUMBER: 117:233851  
 TITLE: Preparation of hydrazoneindolones as excitatory amino acid antagonists  
 INVENTOR(S): Dahl, Bjarne Hugo; Waetjen, Frank  
 PATENT ASSIGNEE(S): Neurosearch A/S, Den.  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 503349	A1	19920916	EP 1992-103104	19920224
EP 503349	B1	19950104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
US 5164404	A	19921117	US 1991-670061	19910315
ZA 9201328	A	19921125	ZA 1992-1328	19920224
ES 2069330	T3	19950501	ES 1992-103104	19920224
AU 9211225	A1	19920917	AU 1992-11225	19920226
AU 643877	B2	19931125		
CA 2062853	AA	19920916	CA 1992-2062853	19920312
NO 9201000	A	19920916	NO 1992-1000	19920313
NO 180191	B	19961125		
NO 180191	C	19970305		
JP 05078350	A2	19930330	JP 1992-55531	19920313
JP 3407896	B2	20030519		
PRIORITY APPLN. INFO.:			US 1991-670061	A 19910315
OTHER SOURCE(S):			MARPAT 117:233851	
GI				



AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph, (substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 =

(substituted) Ph, -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoxy, NO<sub>2</sub>, cyano, CF<sub>3</sub>, SO<sub>2</sub>NR<sub>11</sub>R<sub>12</sub>; R<sub>11</sub>, R<sub>12</sub> = H, CH<sub>2</sub>Ph, C1-6 alkyl; or R<sub>6</sub>R<sub>7</sub> or R<sub>4</sub>R<sub>5</sub> = atoms to complete a 4-8 membered (substituted) carbocyclic ring] were prep'd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeOH contg. HCl to give 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC<sub>50</sub>'s of 1-100 μM.

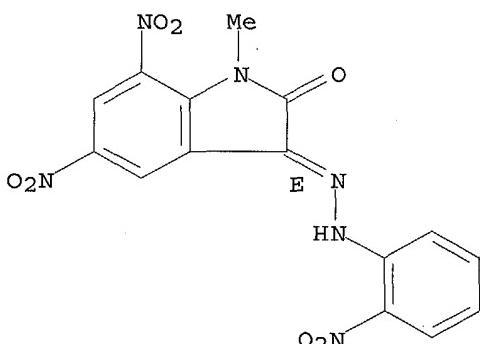
IT 144405-80-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as antagonist for excitatory **amino acids**)

RN 144405-80-1 CAPPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[(2-nitrophenyl)hydrazone], (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



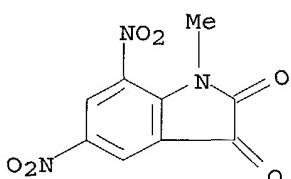
IT 136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for excitatory **amino acid** antagonists)

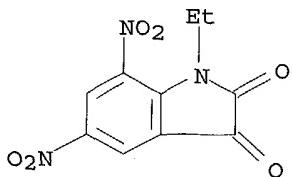
RN 136622-60-1 CAPPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

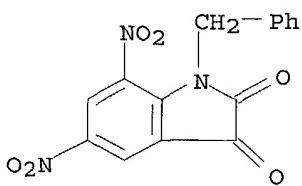


RN 136622-61-2 CAPPLUS

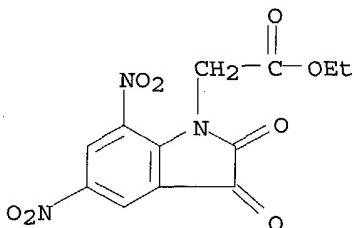
CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136622-65-6 CAPLUS  
CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS  
CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



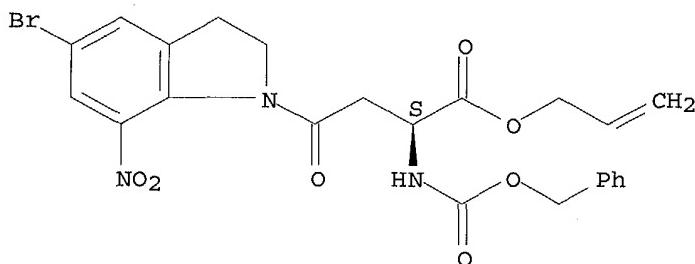
=> d 16 ibib abs hitstr tot

L6 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2003:301852 CAPLUS  
DOCUMENT NUMBER: 139:85609  
TITLE: Phototransamidation as a method for the synthesis of N-glycosyl asparagines  
AUTHOR(S): Vizvardi, Kristof; Kreutz, Christian; Davis, Alexander S.; Lee, Vincent P.; Philmus, Benjamin J.; Simo, Ondrej; Michael, Katja  
CORPORATE SOURCE: Department of Chemistry, University of Hawaii, Honolulu, 96822, USA  
SOURCE: Chemistry Letters (2003) 32(4), 348-349  
PUBLISHER: Chemical Society of Japan  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB N-Glycosyl asparagines were synthesized by a mild photochem. coupling method in which a photoreactive amide of an aspartic acid's beta-carboxyl group is condensed with an aminosaccharide. Upon excitation, the gamma-carbon becomes susceptible to nucleophilic attack and the obtained N-glycosyl asparagines, which may be useful building

blocks for the synthesis of N-glycopeptides and neoglycopeptides, are generated in good yields.

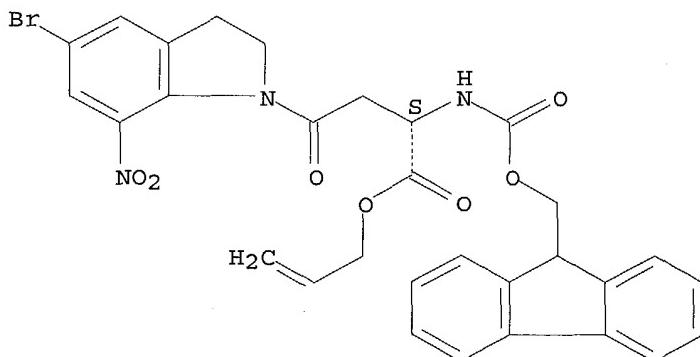
IT 553681-57-5P 553681-58-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of N-glycosyl asparagines by using a mild photochem.  
transamidation step)  
RN 553681-57-5 CAPLUS  
CN 1H-Indole-1-butanoic acid, 5-bromo-2,3-dihydro-7-nitro-.gamma.-oxo-.alpha.-[(phenylmethoxy)carbonyl]amino]-, 2-propenyl ester, (.alpha.S)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 553681-58-6 CAPLUS  
CN 1H-Indole-1-butanoic acid, 5-bromo-.alpha.-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-2,3-dihydro-7-nitro-.gamma.-oxo-, 2-propenyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

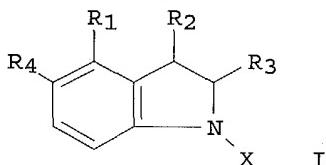


REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

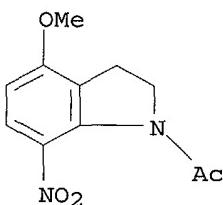
L6 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:814100 CAPLUS  
DOCUMENT NUMBER: 137:325331  
TITLE: Preparation of 7-nitroindoline derivatives for use as photochemical precursors capable of releasing bioactive effector moieties  
INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George  
PATENT ASSIGNEE(S): Medical Research Council, UK  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083639	A1	20021024	WO 2002-GB971	20020308
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.: GB 2001-9093 A 20010411				
OTHER SOURCE(S): CASREACT 137:325331; MARPAT 137:325331				
GI				

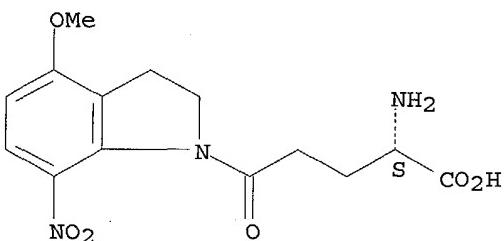


- AB A process is described for producing 7-nitroindolines, the process comprising reacting a substituted indoline [e.g., I; wherein R1 = alkoxy or substituted alkoxy group; R2, R3, independently = H, alkyl, or R2 and R3 together are cycloalkyl; R4 = alkyl, aryl, etc.; X = effector moiety linked to the nitrogen atom at the 1-position of the indoline ring via an acyl linkage, or is a group which is capable of linkage to an effector moiety] with copper(II) nitrate and acetic anhydride to produce the 7-nitroindoline. For example, 1-[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl]-4-methoxyindoline was reacted with clay supported copper(II) nitrate and acetic anhydride in CC14 to give, among other products, 43% 1-[S-(4-tert-butoxycarbonyl)-4-(tert-butoxycarbonylamino)]butanoyl]-4-methoxy-7-nitroindoline. The prepd. compds. are useful to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required.
- IT 295325-60-9P 295325-62-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)
- RN 295325-60-9 CAPLUS
- CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)



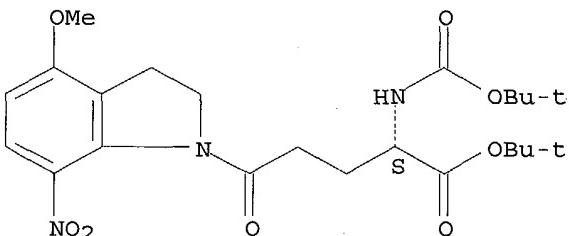
RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 444189-55-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of nitroindole derivs. by nitration with copper(II) nitrate and acetic anhydride)  
RN 444189-55-3 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2001:759359 CAPLUS  
DOCUMENT NUMBER: 136:210906  
TITLE: Photochemical and pharmacological evaluation of 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters  
AUTHOR(S): Canepari, M.; Nelson, L.; Papageorgiou, G.; Corrie, J. E. T.; Ogden, D.

CORPORATE SOURCE: National Institute for Medical Research, London, NW7  
1AA, UK

SOURCE: Journal of Neuroscience Methods (2001), 112(1), 29-42  
CODEN: JNMEDT; ISSN: 0165-0270

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

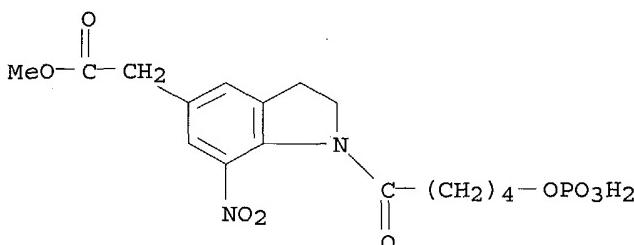
AB Reagents capable of rapid and efficient release of neuroactive **amino acids** (L-glutamate, GABA and glycine) upon flash photolysis of thermally stable, inert precursors have been elusive. 7-Nitroindolinyl (NI)-caged and 4-methoxy-7-nitroindolinyl (MNI)-caged compds. that fulfil these criteria are evaluated here. These caged precursors are highly resistant to hydrolysis. Photolysis is fast (half time  $\leq 0.26$  ms) and the conversion achieved with a xenon flashlamp is about 15% for the NI-caged L-glutamate and about 35% for the MNI-caged L-glutamate. A procedure is described for calibration of photolysis in a microscope-based exptl. app. NI-caged L-glutamate itself showed no agonist or antagonist effects on AMPA and NMDA receptors in cultured neurons, and had no effect on climbing fiber activation of Purkinje neurons. A control compd. with identical photochem. that generated an inert phosphate upon photolysis was used to confirm that the intermediates and byproducts of photolysis have no deleterious effects. MNI-caged L-glutamate is as stable and fast as NI-caged L-glutamate and similarly inert at glutamate receptors, but about 2.5 times more efficient. However, NI-caged GABA is an antagonist at GABAA receptors and NI-glycine an antagonist at glycine receptors. The results show the utility and limitations of these fast and stable caged neurotransmitters in the investigation of synaptic processes.

IT 239135-33-2 239135-34-3 295325-62-1

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-**amino acids** as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 239135-33-2 CAPLUS

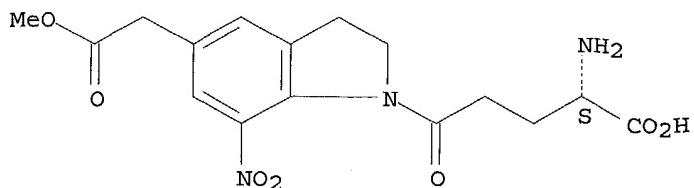
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

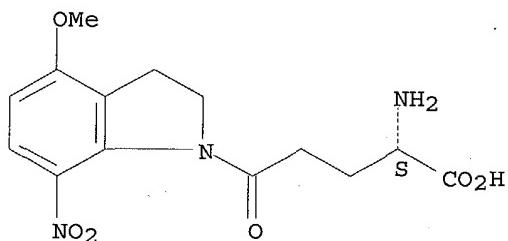
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



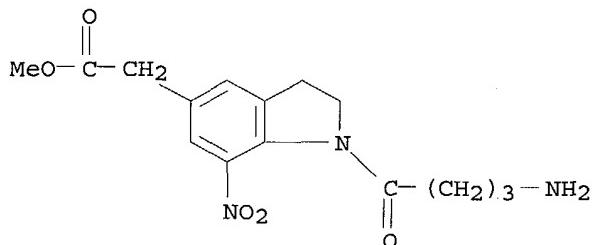
RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.  
.delta.-oxo-, (.alpha.S) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

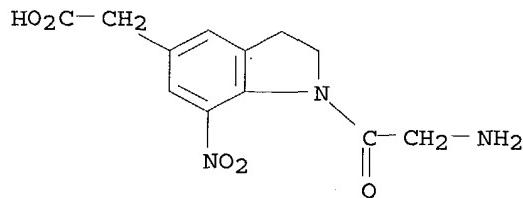


IT 295325-58-5P 402470-76-2P  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(photochem. and pharmacol. evaluation of synthetic 7-nitroindolinyl-and 4-methoxy-7-nitroindolinyl-amino acids as novel, fast caged neurotransmitters useful in investigating synaptic neurotransmission)

RN 295325-58-5 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

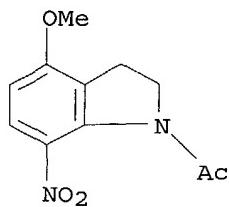


RN 402470-76-2 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-(aminoacetyl)-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)

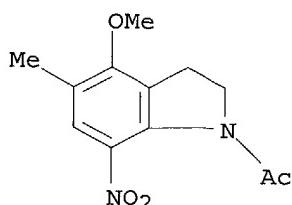


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2000:698992 CAPLUS  
DOCUMENT NUMBER: 134:71451  
TITLE: Effects of Aromatic Substituents on the Photocleavage of 1-Acyl-7-nitroindolines  
AUTHOR(S): Papageorgiou, G.; Corrie, J. E. T.  
CORPORATE SOURCE: National Institute for Medical Research, The Ridgeway, Mill Hill, London, NW7 1AA, UK  
SOURCE: Tetrahedron (2000), 56(41), 8197-8205  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:71451  
AB Photolysis of 1-acyl-7-nitroindolines in aq. soln. gives a carboxylic acid and a 7-nitrosoindole. These compds. are useful as photolabile precursors of carboxylic acids, particularly neuro-active amino acids. 4-Methoxy substitution improved the photolysis efficiency degree 2-fold but a 4-dimethylamino analog was essentially inert. A 5-alkyl substituent, that blocks unwanted nitration at this position, reduced the beneficial effect of the 4-methoxy group.  
IT 295325-60-9P 295325-61-0P 295325-62-1P  
314762-04-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(effect of arom. substituents on photocleavage of 1-acyl-7-nitroindolines)  
RN 295325-60-9 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

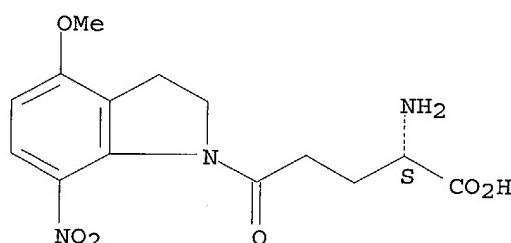


RN 295325-61-0 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

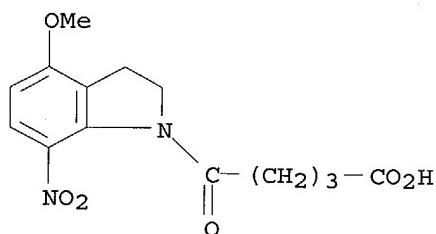


RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

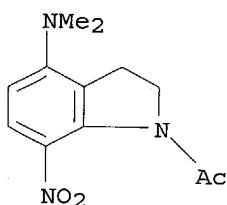
Absolute stereochemistry.



RN 314762-04-4 CAPLUS  
CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



IT 295325-98-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(effect of arom. substituents on photocleavage of 1-acyl-7-nitroindolines)  
RN 295325-98-3 CAPLUS  
CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)

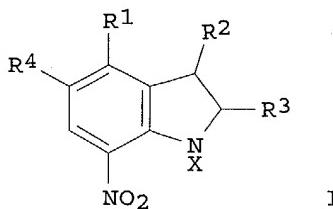


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2000:666708 CAPLUS  
 DOCUMENT NUMBER: 133:252301  
 TITLE: Preparation of 1-acyl-7-nitroindoline derivatives as photoreleasable precursors for release of bioactive effector moieties.  
 INVENTOR(S): Corrie, John Edgar Thomas; Papageorgiou, George  
 PATENT ASSIGNEE(S): Medical Research Council, UK  
 SOURCE: PCT Int. Appl., 70 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055133	A1	20000921	WO 2000-GB1039	20000320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1161418	A1	20011212	EP 2000-911095	20000320
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002539196	T2	20021119	JP 2000-605564	20000320
PRIORITY APPLN. INFO.:			GB 1999-6192	A 19990318
			WO 2000-GB1039	W 20000320

OTHER SOURCE(S): MARPAT 133:252301  
 GI



AB Photoreleasable compds. comprising a caging moiety linked to an effector moiety [I; R1, R4 = H, (substituted) alkyl, O(CH<sub>2</sub>)<sub>n</sub>Y; N(CO<sub>Z</sub>)(CH<sub>2</sub>)<sub>m</sub>Y, N[(CH<sub>2</sub>)<sub>m</sub>Y<sub>1</sub>] [(CH<sub>2</sub>)<sub>n</sub>Y]; R2, R3 = H, (substituted) alkyl; R<sub>2</sub>R<sub>3</sub> = cycloalkyl; m, n = 1-10; Y, Y<sub>1</sub> = H, CO<sub>2</sub>H, salts thereof, OPO<sub>3</sub><sup>2-</sup>; Z = H, (substituted) alkyl; X = effector moiety or a group capable of being coupled or converted to an effector moiety], which are capable of releasing the effector moiety on irradn., typically by flash irradn. with UV light, were prep'd. I can be used to deliver biol. active effector moieties such as neuroactive **amino acids** or metal chelators to sites where their activity is required. Thus, Me 1-[4-(tert-butoxycarbonylamino)butanoyl]indoline-5-acetate (prepn. given) was stirred with NaNO<sub>3</sub> in CF<sub>3</sub>CO<sub>2</sub>H to give Me 1-(4-aminobutanoyl)-7-nitroindoline-5-

acetate as the phosphate salt. This was photolyzed in ammonium phosphate soln. using an Hg arc lamp; at 38% photolysis recovery of GABA was 88%.

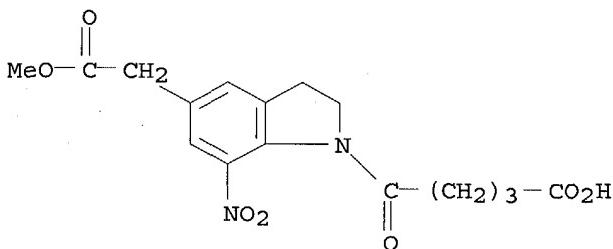
IT 239135-32-1P 239135-33-2P 239135-34-3P  
 239135-39-8P 295325-58-5P 295325-59-6P  
 295325-60-9P 295325-61-0P 295325-62-1P  
 295325-63-2P 295325-64-3P 295325-65-4P  
 295325-66-5P 295325-67-6P 295325-68-7P  
 295325-69-8P 295325-72-3P 295325-74-5P  
 295325-75-6P 295325-77-8P 295325-78-9P  
 295325-98-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

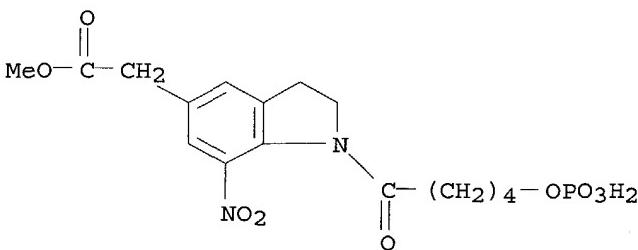
RN 239135-32-1 CAPPLUS

CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 239135-33-2 CAPPLUS

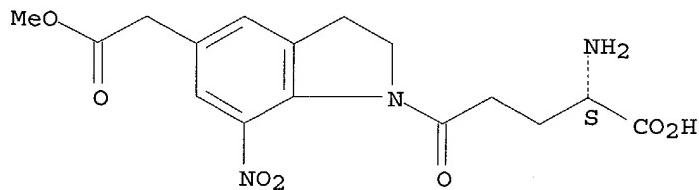
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)



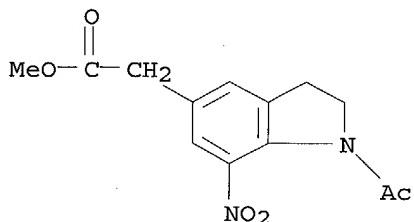
RN 239135-34-3 CAPPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

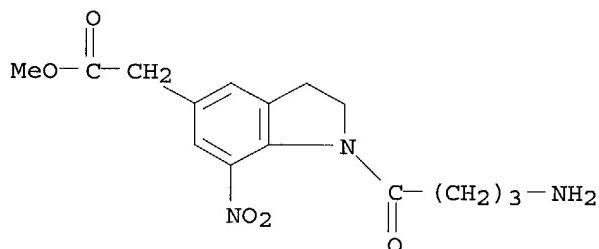
Absolute stereochemistry.



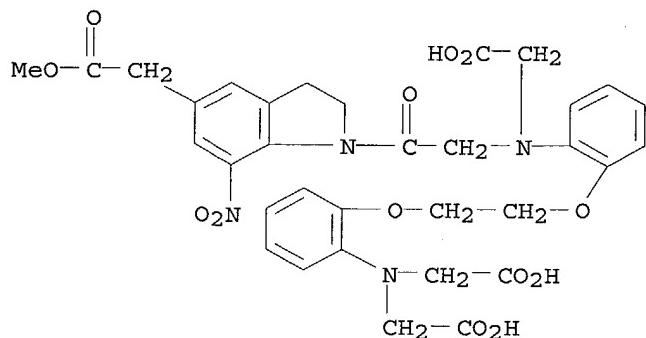
RN 239135-39-8 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI)  
(CA INDEX NAME)



RN 295325-58-5 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-(4-amino-1-oxobutyl)-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)

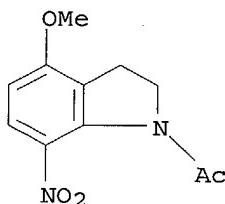


RN 295325-59-6 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-[[[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl](carboxymethyl)amino]acetyl]-2,3-dihydro-7-nitro-, alpha.-methyl ester (9CI) (CA INDEX NAME)

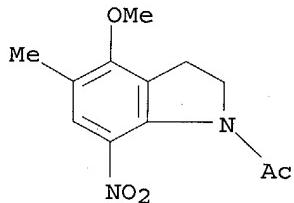


13/08/2003 Page 43 10:20 <golam shamee 08/13/2003

RN 295325-60-9 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

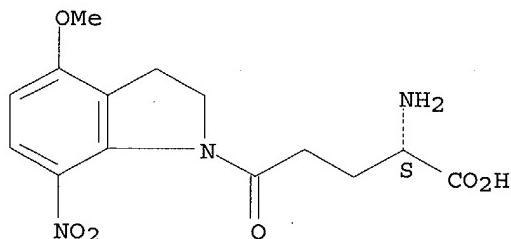


RN 295325-61-0 CAPLUS  
CN 1H-Indole, 1-acetyl-2,3-dihydro-4-methoxy-5-methyl-7-nitro- (9CI) (CA INDEX NAME)

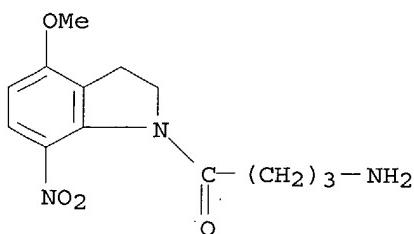


RN 295325-62-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

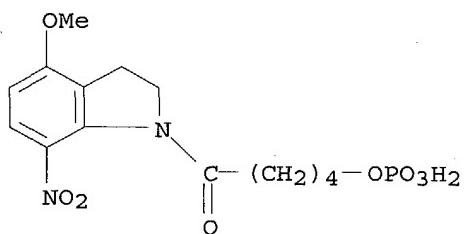


RN 295325-63-2 CAPLUS  
CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-7-nitro- (9CI) (CA INDEX NAME)

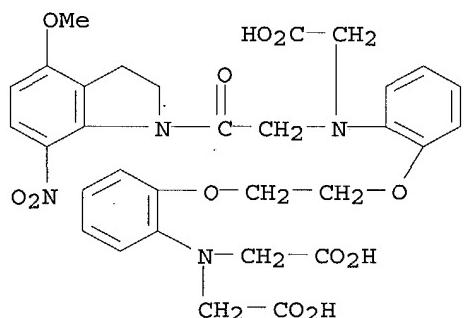


13/08/2003 Page 44 10:20 <golam shamee 08/13/2003

RN 295325-64-3 CAPLUS  
CN 1H-Indole, 2,3-dihydro-4-methoxy-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl] -  
(9CI) (CA INDEX NAME)

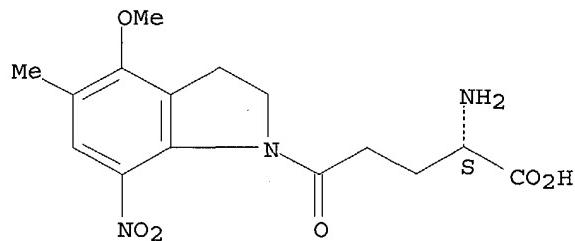


RN 295325-65-4 CAPLUS  
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-7-nitro-1H-indol-1-yl)-2-oxoethyl] - (9CI) (CA INDEX NAME)

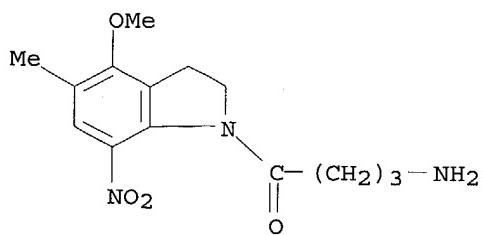


RN 295325-66-5 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-4-methoxy-5-methyl-7-nitro-.delta.-oxo-, (.alpha.S) - (9CI) (CA INDEX NAME)

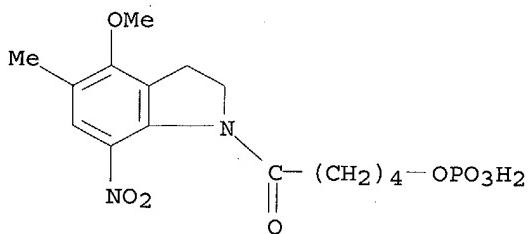
Absolute stereochemistry.



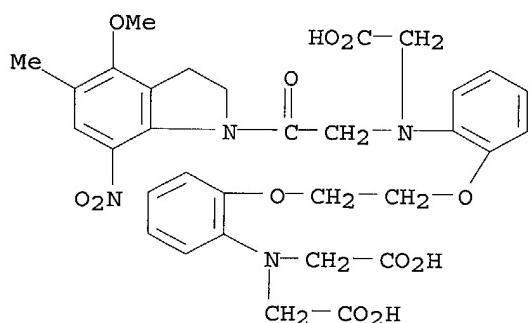
RN 295325-67-6 CAPLUS  
CN 1H-Indole, 1-(4-amino-1-oxobutyl)-2,3-dihydro-4-methoxy-5-methyl-7-nitro-  
(9CI) (CA INDEX NAME)



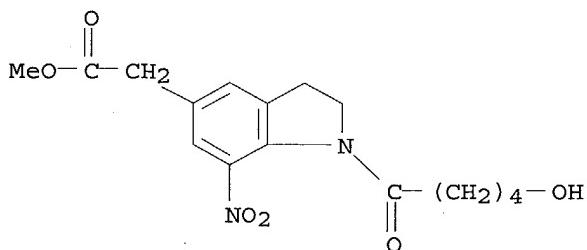
RN 295325-68-7 CAPLUS  
CN 1H-Indole, 2,3-dihydro-4-methoxy-5-methyl-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



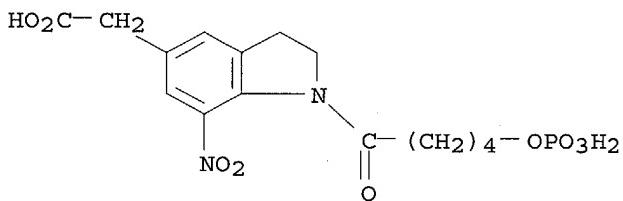
RN 295325-69-8 CAPLUS  
CN Glycine, N-[2-[2-[2-[bis(carboxymethyl)amino]phenoxy]ethoxy]phenyl]-N-[2-(2,3-dihydro-4-methoxy-5-methyl-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



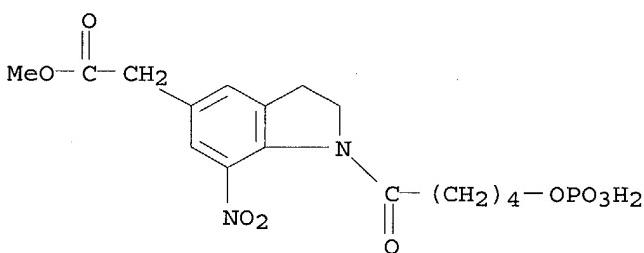
RN 295325-72-3 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-1-(5-hydroxy-1-oxopentyl)-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-74-5 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]- (9CI) (CA INDEX NAME)



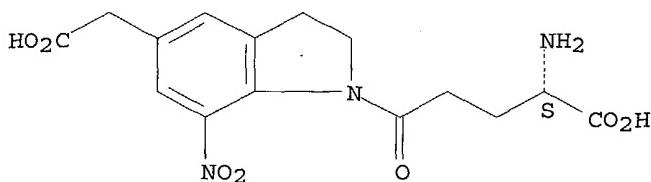
RN 295325-75-6 CAPLUS  
CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonooxy)pentyl]-, .alpha.-methyl ester, disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 295325-77-8 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5-(carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, disodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

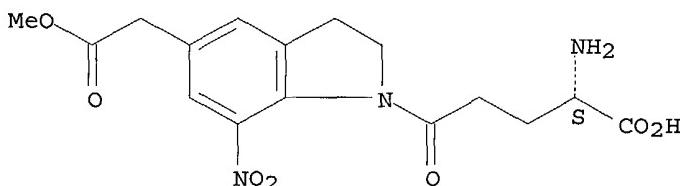


●2 Na

RN 295325-78-9 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, monosodium salt, (.alpha.S)- (9CI) (CA INDEX NAME)

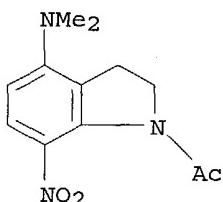
Absolute stereochemistry.



● Na

RN 295325-98-3 CAPLUS

CN 1H-Indol-4-amine, 1-acetyl-2,3-dihydro-N,N-dimethyl-7-nitro- (9CI) (CA INDEX NAME)



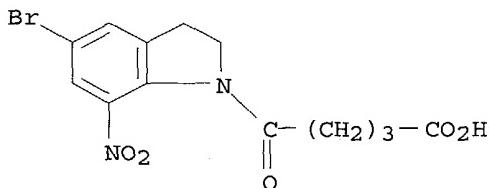
IT 239135-35-4P 295325-73-4P 295325-76-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

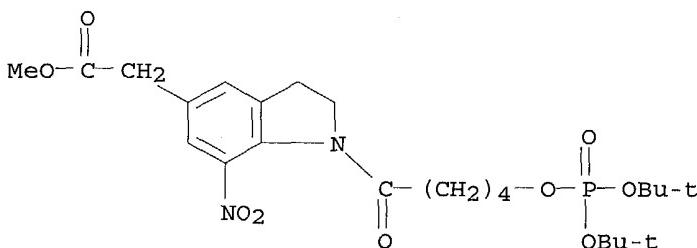
(prepn. of 1-acyl-7-nitroindoline derivs. as photocleavable precursors for release of bioactive effector moieties)

RN 239135-35-4 CAPLUS

CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)

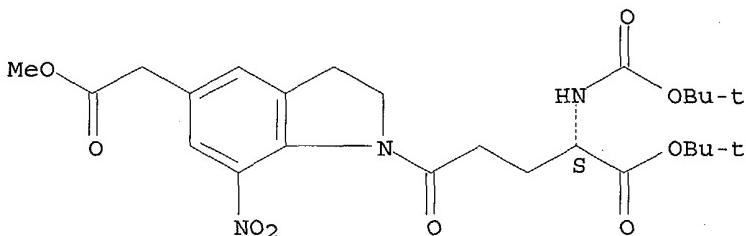


RN 295325-73-4 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-[5-[[bis(1,1-dimethylethoxy)phosphinyl]oxy]-1-oxopentyl]-2,3-dihydro-7-nitro-, methyl ester (9CI) (CA INDEX NAME)



RN 295325-76-7 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-[(1,1-dimethylethoxy)carbonyl]amino]-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, 1,1-dimethylethyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:390833 CAPLUS  
DOCUMENT NUMBER: 131:165619  
TITLE: Photorelease of Carboxylic Acids from 1-Acyl-7-nitroindolines in Aqueous Solution: Rapid and Efficient Photorelease of L-Glutamate  
AUTHOR(S): Papageorgiou, George; Ogden, David C.; Barth, Andreas; Corrie, John E. T.  
CORPORATE SOURCE: National Institute for Medical Research, London, NW7 1AA, UK  
SOURCE: Journal of the American Chemical Society (1999), 121(27), 6503-6504  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal

LANGUAGE:

English

AB Photorelease of biol. active compds. from photocleavable (caged) precursors is a useful tool to study biol. processes but rapid, efficient release of neuroactive **amino acids** has been elusive.

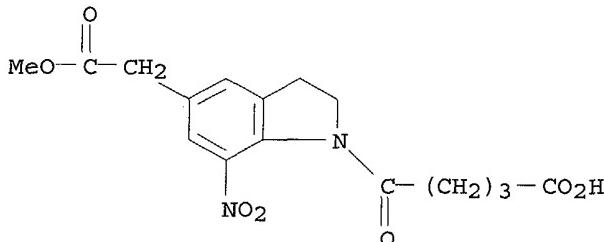
We now describe stable 1-acyl-7-nitro-indolines that rapidly and efficiently photorelease carboxylates, including L-glutamate, in neutral aq. soln. L-Glutamate precursors were tested in primary cultures of rat cerebellar granule neurons for their pharmacol. properties and ability to activate glutamate ion channels upon photolysis.

IT 239135-32-1P 239135-34-3P

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-32-1 CAPLUS

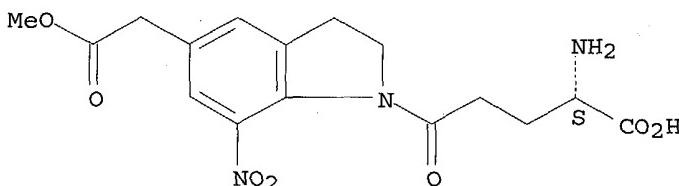
CN 1H-Indole-1-pentanoic acid, 2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo- (9CI) (CA INDEX NAME)



RN 239135-34-3 CAPLUS

CN 1H-Indole-1-pentanoic acid, .alpha.-amino-2,3-dihydro-5-(2-methoxy-2-oxoethyl)-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

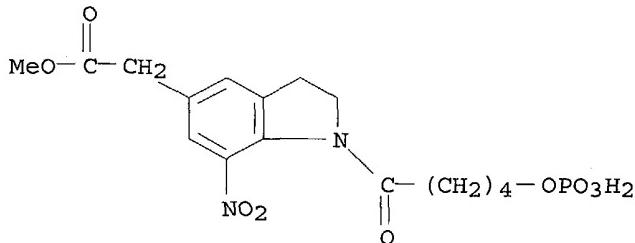


IT 239135-33-2P 239135-35-4P

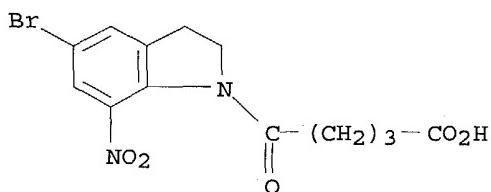
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)

RN 239135-33-2 CAPLUS

CN 1H-Indole-5-acetic acid, 2,3-dihydro-7-nitro-1-[1-oxo-5-(phosphonoxy)pentyl]-, .alpha.-methyl ester (9CI) (CA INDEX NAME)

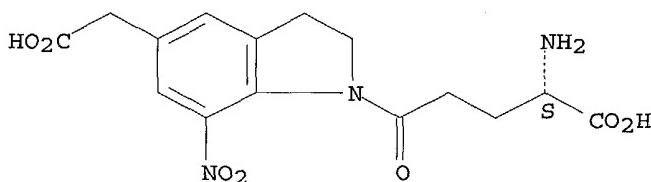


RN 239135-35-4 CAPLUS  
CN 1H-Indole-1-pentanoic acid, 5-bromo-2,3-dihydro-7-nitro-.delta.-oxo- (9CI)  
(CA INDEX NAME)

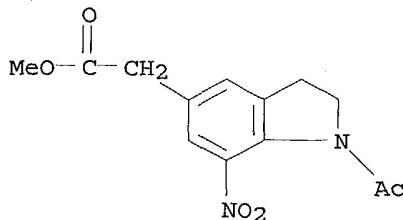


IT 239135-40-1P  
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)  
RN 239135-40-1 CAPLUS  
CN 1H-Indole-1-pentanoic acid, .alpha.-amino-5- (carboxymethyl)-2,3-dihydro-7-nitro-.delta.-oxo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



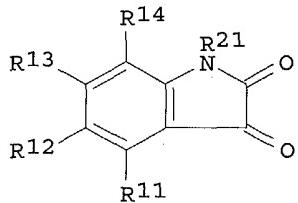
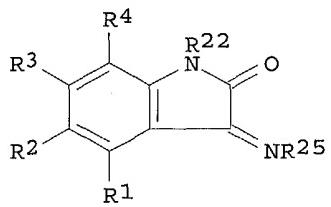
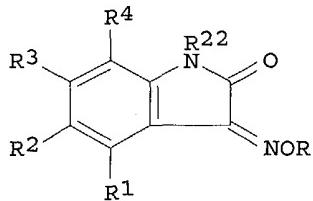
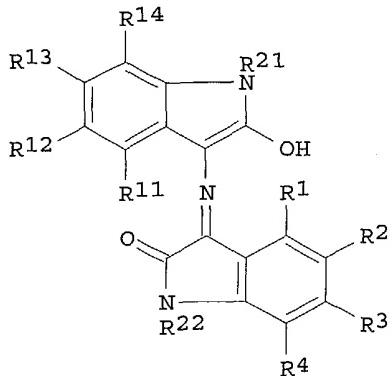
IT 239135-39-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of 1-acyl-7-nitroindolines that photorelease L-glutamate in cerebellar granule neurons)  
RN 239135-39-8 CAPLUS  
CN 1H-Indole-5-acetic acid, 1-acetyl-2,3-dihydro-7-nitro-, methyl ester (9CI)  
(CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1995:884192 CAPLUS  
DOCUMENT NUMBER: 123:285774  
TITLE: Preparation of isatin-derivative excitatory amino acid receptor antagonists  
INVENTOR(S): Watjen, Frank  
PATENT ASSIGNEE(S): Neurosearch A/S, Den.  
SOURCE: Eur. Pat. Appl., 10 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 667340	A1	19950816	EP 1995-610002	19950117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5565580	A	19961015	US 1995-372598	19950113
JP 08034771	A2	19960206	JP 1995-10136	19950125
PRIORITY APPLN. INFO.:		DK 1994-114	19940127	
OTHER SOURCE(S):		CASREACT 123:285774; MARPAT 123:285774		
GI				



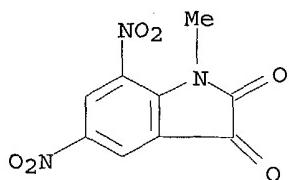
AB The title compds. (I; R1-R4, R11-R14 = H, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub>; .gtoreq.1 of which must .noteq. H; for R21 and R22 one is H and the other is alkyl or both are H), useful as excitatory **amino acid** (e.g., NMDA, AMPA) receptor antagonists for the treatment of cerebrovascular diseases (no data), Alzheimer's disease (no data), schizophrenia (no data), Parkinsonism (no data), etc. (no data), are prep'd. by heating isatin derivs. (II; R = alkyl, PhCH<sub>2</sub>; or III; R25 = alkyl, aralkyl) with dihydroindolediones (IV). Thus, 5,7-dinitroindole-2,3-dione and PhCH<sub>2</sub>NH<sub>2</sub> were heated together in AcOH and EtOH, producing I (R1 = R3 = R11 = R13 = R21 = R22 = H, R2 = R4 = R12 = R14 = NO<sub>2</sub>) (V), m.p. >300.degree.. V demonstrated a ED<sub>50</sub> of 0.1 mg/kg (i.v.) for breaking 2-amino-3-(3-hydroxy-5-tert-butyl-4-isoxazolyl)propionic acid-induced rigidity in mice.

IT 136622-60-1, 5,7-Dinitro-1-methylindole-2,3-dione

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of isatin-deriv. excitatory **amino acid**  
receptor antagonists)

RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:761965 CAPLUS

DOCUMENT NUMBER: 123:340088

TITLE: Isatin oxime derivatives, their preparation and use as antagonists of excitatory **amino**

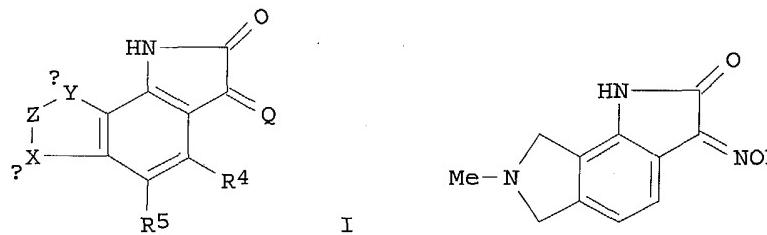
INVENTOR(S): acids at the AMPA receptor  
Waetjen, Frank; Dahl, Bjarne H.; Drejer, Jorgen;  
Jensen, Lein H.  
PATENT ASSIGNEE(S): NeuroSearch A/S, Den.  
SOURCE: U.S., 8 pp. Cont.-in-part of U.S. 5,242,918.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5436250	A	19950725	US 1993-88328	19930707
ZA 9206491	A	19930308	ZA 1992-6491	19920827
AU 9224820	A1	19930405	AU 1992-24820	19920827
AU 655672	B2	19950105		
US 5242918	A	19930907	US 1992-936579	19920827
PL 170920	B1	19970228	PL 1992-302584	19920827
CZ 282759	B6	19970917	CZ 1994-395	19920827
SK 280578	B6	20000410	SK 1994-238	19920827
NO 9400676	A	19940427	NO 1994-676	19940225
PRIORITY APPLN. INFO.:			US 1991-751165	B2 19910828
			US 1992-831851	B2 19920205
			US 1992-936579	A2 19920827
			WO 1992-EP1999	A 19920827

OTHER SOURCE(S) : MARPAT 123:340088

GI



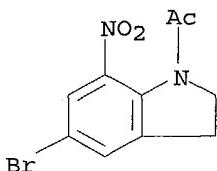
AB Isatin oxime derivs. I are claimed wherein R4 and R5 independently are hydrogen, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub> or SO<sub>2</sub>NR<sub>1</sub>R<sub>2</sub> wherein R1 is hydrogen or C<sub>1</sub>-6-alkyl which may be straight, branched or cyclic, R2 is hydrogen or C<sub>1</sub>-6-alkyl which may be straight, branched or cyclic, or wherein R1 and R2 together represent (CH<sub>2</sub>)<sub>n</sub>A(CH<sub>2</sub>)<sub>m</sub>, wherein A is O, S, CH<sub>2</sub> or NRI, wherein RI is H, C<sub>1</sub>-6-alkyl which may be straight, branched or cyclic, n is 0, 1, 2, 3, 4, 5 and m is 0, 1, 2, 3, 4, 5; Q is NOH, O; Z = O, S, NR<sub>II</sub>, .alpha.-C(:O)NRII-.beta., NRIVC(:O)NRV, .alpha.-OC(:O)-.beta., wherein R<sub>III</sub>, R<sub>IV</sub>, R<sub>V</sub> and R<sub>V</sub> independently are hydrogen, benzyl, (C<sub>2</sub>O)CF<sub>3</sub>, C<sub>1</sub>-6-acyl, C<sub>1</sub>-6-alkoxy which may be branched or cyclic, or C<sub>1</sub>-6-alkyl which may be straight, branched or cyclic, CH<sub>2</sub>CO<sub>2</sub>RV where R<sub>V</sub> is hydrogen or C<sub>1</sub>-6-alkyl which may be straight or branched; X is (CH<sub>2</sub>)<sub>o</sub> wherein o is 0, 1, 2, or 3; Y is (CH<sub>2</sub>)<sub>p</sub> wherein p is 0, 1, 2 or 3; .alpha. and .beta. indicate attachment points. I exhibit valuable biol. properties because of their strong excitatory **amino acid** (EAA) antagonizing properties at the AMPA [(RS)-.alpha.-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid] binding site. Thus, e.g., oximation of 7-methyl-1,6,7,8-tetrahydrobenzo[2,1-b:3,4-c']dipyrrole-2,3-dione (prepn. given) with hydroxylamine hydrochloride afforded 7-methyl-1,6,7,8-tetrahydrobenzo[2,1-b:3,4-c']dipyrrole-2,3-dione-3-oxime (II) which exhibited an IC<sub>50</sub> of 1. $\mu$ M in the AMPA binding assay.

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IT 62368-07-4, 1-Acetyl-5-bromo-7-nitroindoline  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(isatin oxime derivs., their prepn. and use as antagonists of  
excitatory **amino acids** at the AMPA receptor)

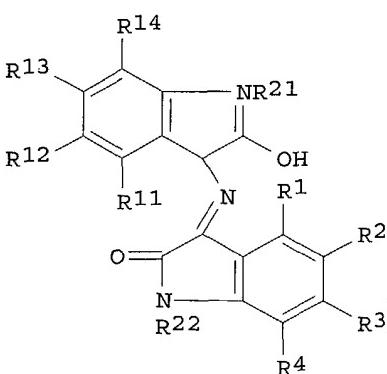
RN 62368-07-4 CAPLUS

CN 1H-Indole, 1-acetyl-5-bromo-2,3-dihydro-7-nitro- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1995:416352 CAPLUS  
DOCUMENT NUMBER: 122:187389  
TITLE: Preparation of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory **amino acid** antagonists  
INVENTOR(S): Waetjen, Frank; Drejer, Jorgen; Jensen, Leif Helth  
PATENT ASSIGNEE(S): Neurosearch A/S, Den.  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 629615	A1	19941221	EP 1994-610030	19940601
EP 629615	B1	20000223		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 189889	E	20000315	AT 1994-610030	19940601
US 5478859	A	19951226	US 1994-259016	19940613
PRIORITY APPLN. INFO.:		DK 1993-696		19930614
OTHER SOURCE(S):	MARPAT 122:187389			
GI				



AB Title compds. (I; R1-R4, R11-R14 = H, halo, CF<sub>3</sub>, cyano, NO<sub>2</sub>; R21, R22 =

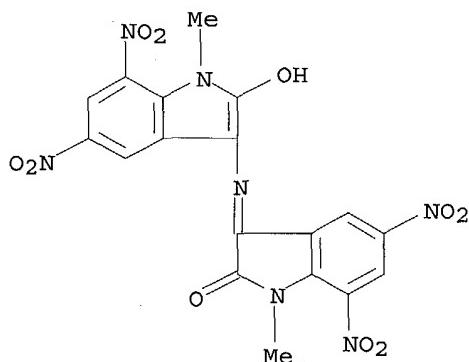
alkyl) were prep'd. Thus, 5,7-dinitro-1-methylindole-2,3-dione was refluxed with PhCH<sub>2</sub>NH<sub>2</sub> in EtOH contg. HOAc to give I (R<sub>2</sub> = R<sub>4</sub> = R<sub>12</sub> = R<sub>14</sub> = NO<sub>2</sub>, R<sub>21</sub> = R<sub>22</sub> = Me) which had ED<sub>50</sub> of 0.1mg/kg i.v. against  $\alpha$ -amino-3-hydroxy-5-tert-butyl-4-isoxazolepropionic acid-induced rigidity in mice.

IT 161557-74-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prep'n. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory amino acid antagonists)

RN 161557-74-0 CAPLUS

CN 2H-Indol-2-one, 1,3-dihydro-3-[(2-hydroxy-1-methyl-5,7-dinitro-1H-indol-3-yl)imino]-1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)

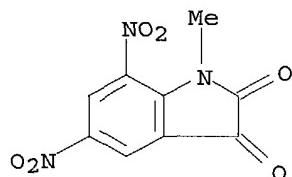


IT 136622-60-1 136623-08-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prep'n. of 3-(2-oxo-3-indolylideneimino)-2-hydroxyindoles as excitatory amino acid antagonists)

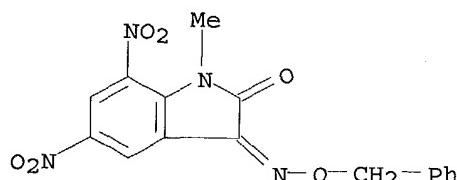
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136623-08-0 CAPLUS

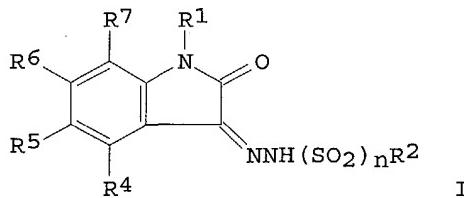
CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:633851 CAPLUS  
 DOCUMENT NUMBER: 117:233851  
 TITLE: Preparation of hydrazonoindolones as excitatory  
**amino acid** antagonists  
 INVENTOR(S): Dahl, Bjarne Hugo; Waetjen, Frank  
 PATENT ASSIGNEE(S): Neurosearch A/S, Den.  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 503349	A1	19920916	EP 1992-103104	19920224
EP 503349	B1	19950104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, PT, SE				
US 5164404	A	19921117	US 1991-670061	19910315
ZA 9201328	A	19921125	ZA 1992-1328	19920224
ES 2069330	T3	19950501	ES 1992-103104	19920224
AU 9211225	A1	19920917	AU 1992-11225	19920226
AU 643877	B2	19931125		
CA 2062853	AA	19920916	CA 1992-2062853	19920312
NO 9201000	A	19920916	NO 1992-1000	19920313
NO 180191	B	19961125		
NO 180191	C	19970305		
JP 05078350	A2	19930330	JP 1992-55531	19920313
JP 3407896	B2	20030519		

PRIORITY APPLN. INFO.: US 1991-670061 A 19910315  
 OTHER SOURCE(S): MARPAT 117:233851  
 GI



AB Title compds. I [n = 0, 1; R1 = H, C1-6 alkyl, C3-7 cycloalkyl, CH2Ph, (substituted) Ph, acyl, OH, C1-6 alkoxy, CH2CO2H, CH2CN, etc.; R2 = (substituted) Ph, -pyridyl; R4 - R7 = H, C1-36 alkyl, Ph, halo, C1-6 alkoxy, NO2, cyano, CF3, SO2NR11R12; R11, R12 = H, CH2Ph, C1-6 alkyl; or R6R7 or R4R5 = atoms to complete a 4-8 membered (substituted) carbocyclic ring] were prep'd. for the treatment of disorders responsive to the blockade of glutamic or aspartic receptors. Thus, 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione (prepn. given) and 2-nitrophenylhydrazone were stirred in MeOH contg. HCl to give 5-nitro-1H-6,7,8,9-tetrahydrobenz[g]indole-2,3-dione-3-(2-nitrophenylhydrazone) as a mixt. of E- and Z-isomers. I are said to exhibit binding at 3H-kainate, NMDA, 3H-AMPA and/or 3H-glycine binding sites with IC50's of 1-100 .mu.M.

IT 144405-80-1P

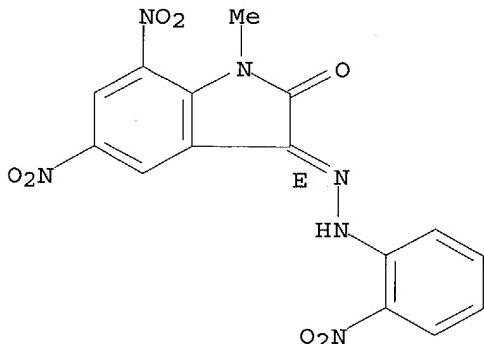
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as antagonist for excitatory **amino acids**)

13/08/2003 Page 57 10:20 <golam shamee 08/13/2003

RN 144405-80-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[(2-nitrophenyl)hydrazone],  
(E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



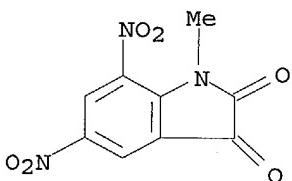
IT 136622-60-1P 136622-61-2P 136622-65-6P

136622-68-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for excitatory **amino acid**  
antagonists)

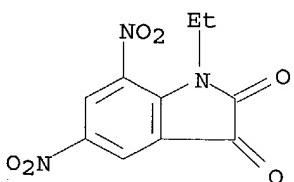
RN 136622-60-1 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



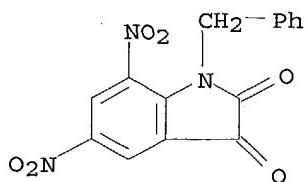
RN 136622-61-2 CAPLUS

CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)

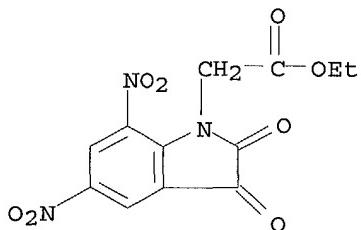


RN 136622-65-6 CAPLUS

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS  
 CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester  
 (9CI) (CA INDEX NAME)

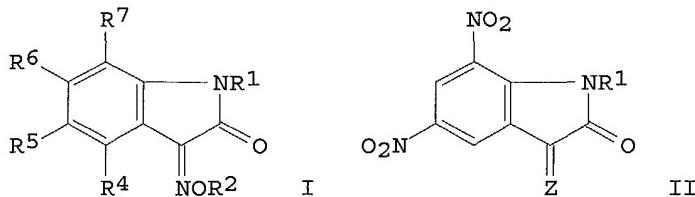


L6 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:583089 CAPLUS  
 DOCUMENT NUMBER: 115:183089  
 TITLE: Preparation of isatin derivatives as central nervous system (CNS) agents  
 INVENTOR(S): Watjen, Frank; Drejer, Jorgen; Jensen, Leif Helth  
 PATENT ASSIGNEE(S): Neurosearch A/S, Den.  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 432648	A2	19910619	EP 1990-123474	19901206
EP 432648	A3	19910925		
EP 432648	B1	19950802		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ZA 9009479	A	19910925	ZA 1990-9479	19901126
JP 03204856	A2	19910906	JP 1990-330898	19901130
JP 3057095	B2	20000626		
FI 9005943	A	19910612	FI 1990-5943	19901203
ES 2077623	T3	19951201	ES 1990-123474	19901206
CA 2031756	AA	19910612	CA 1990-2031756	19901207
CA 2031756	C	20020611		
NO 9005320	A	19910612	NO 1990-5320	19901210
NO 174464	B	19940131		
NO 174464	C	19940511		
AU 9067920	A1	19910613	AU 1990-67920	19901210
AU 629075	B2	19920924		
US 5198461	A	19930330	US 1991-710790	19910605
PRIORITY APPLN. INFO.:			DK 1989-6248	A 19891211
			DK 1989-6470	A 19891219
			DK 1990-85	A 19900112

DK 1990-86	A 19900112
DK 1990-363	A 19900212
DK 1990-2093	A 19900831
US 1990-624409	B2 19901207

OTHER SOURCE(S) : MARPAT 115:183089  
GI



AB Isatin derivs. [I; R1 = H, linear or branched C1-6 alkyl, C3-7 cycloalkyl, (substituted) Ph, PhCH<sub>2</sub>, OH, acyl, etc.; R2 = H, PhCH<sub>2</sub>, linear or branched C1-6 alkyl, C3-7 cycloalkyl; R4-R7 = H, linear or branched C1-6 alkyl, C1-6 alkoxy, Ph, halo, NO<sub>2</sub>, cyano, etc.], esp. useful in treating CNS conditions sensitive to excitatory amino acids. To a stirred soln. of diketone II (R1 = H, Z = O) in DMF was added 55% NaH in mineral oil, followed by MeI with stirring at room temp. to give II (R1 = Me, Z = O), which was treated with MeONH<sub>2</sub>.HCl and Na<sub>2</sub>CO<sub>3</sub> at room temp. to give oxime II (R1 = Me, Z = MeON). Also prep'd. were 54 addnl. I which were effective in treating CNS disorders at 30-100 mg/day.

IT 136622-60-1P 136622-61-2P 136622-65-6P

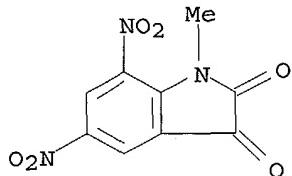
136622-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of central nervous agent)

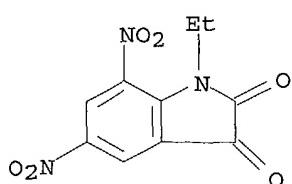
RN 136622-60-1 CAPPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136622-61-2 CAPPLUS

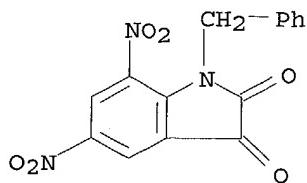
CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro- (9CI) (CA INDEX NAME)



RN 136622-65-6 CAPPLUS

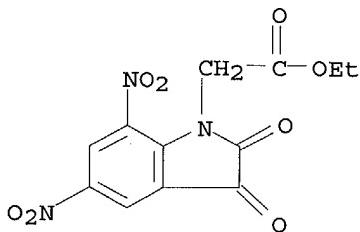
13/08/2003 Page 60 10:20 <golam shamee 08/13/2003

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl) - (9CI) (CA INDEX NAME)



RN 136622-68-9 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

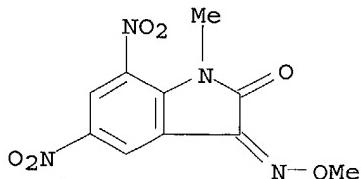


IT 136622-70-3P 136622-72-5P 136622-80-5P  
136622-84-9P 136622-85-0P 136622-90-7P  
136623-03-5P 136623-07-9P 136623-08-0P  
136623-09-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as central nervous agent)

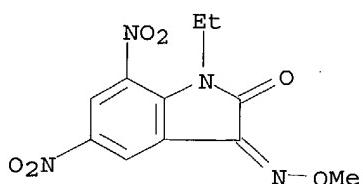
RN 136622-70-3 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-(O-methyloxime) (9CI) (CA INDEX NAME)



RN 136622-72-5 CAPLUS

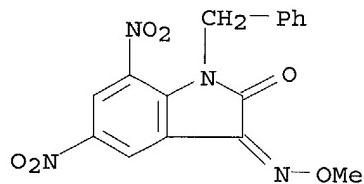
CN 1H-Indole-2,3-dione, 1-ethyl-5,7-dinitro-, 3-(O-methyloxime) (9CI) (CA INDEX NAME)



RN 136622-80-5 CAPLUS

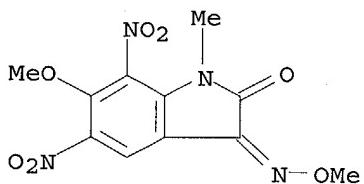
13/08/2003 Page 61 10:20 <golam shamee 08/13/2003

CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)-, 3-(O-methyloxime)  
(9CI) (CA INDEX NAME)



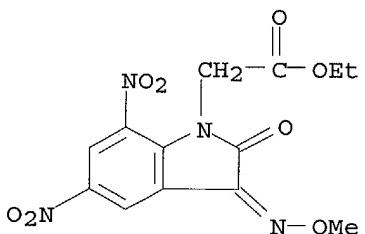
RN 136622-84-9 CAPLUS

CN 1H-Indole-2,3-dione, 6-methoxy-1-methyl-5,7-dinitro-, 3-(O-methyloxime)  
(9CI) (CA INDEX NAME)



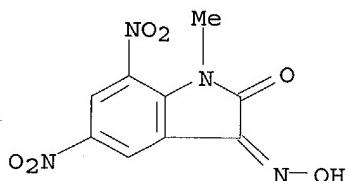
RN 136622-85-0 CAPLUS

CN 1H-Indole-1-acetic acid, 2,3-dihydro-3-(methoxyimino)-5,7-dinitro-2-oxo-,  
ethyl ester (9CI) (CA INDEX NAME)



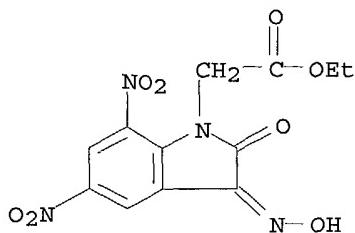
RN 136622-90-7 CAPLUS

CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-oxime (9CI) (CA INDEX NAME)

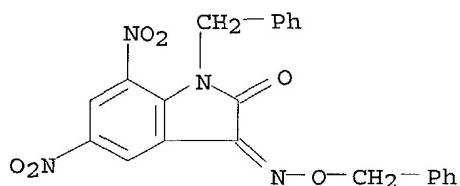


RN 136623-03-5 CAPLUS

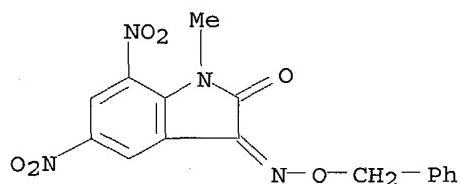
CN 1H-Indole-1-acetic acid, 2,3-dihydro-3-(hydroxyimino)-5,7-dinitro-2-oxo-,  
ethyl ester (9CI) (CA INDEX NAME)



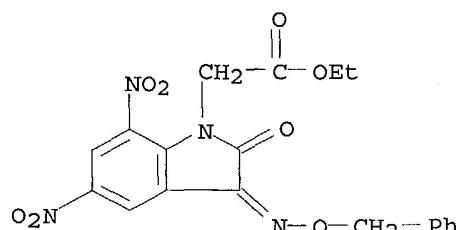
RN 136623-07-9 CAPLUS  
CN 1H-Indole-2,3-dione, 5,7-dinitro-1-(phenylmethyl)-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)



RN 136623-08-0 CAPLUS  
CN 1H-Indole-2,3-dione, 1-methyl-5,7-dinitro-, 3-[O-(phenylmethyl)oxime] (9CI) (CA INDEX NAME)



RN 136623-09-1 CAPLUS  
CN 1H-Indole-1-acetic acid, 2,3-dihydro-5,7-dinitro-2-oxo-3-[ (phenylmethoxy)imino]-, ethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1978:191454 CAPLUS  
DOCUMENT NUMBER: 88:191454  
TITLE: Synthesis of protected peptide acids and esters by  
photosolvolysis of 1-peptidyl-5-bromo-7-nitroindolines  
AUTHOR(S): Goissis, Gilberto; Erickson, Bruce W.; Merrifield, R.

CORPORATE SOURCE:  
SOURCE:

B.  
Rockefeller Univ., New York, NY, USA  
Pept., Proc. Am. Pept. Symp., 5th (1977), 559-61.  
Editor(s): Goodman, Murray; Meienhofer, Johannes.  
Wiley: New York, N. Y.

DOCUMENT TYPE:  
LANGUAGE:

CODEN: 37OBAT  
Conference  
English

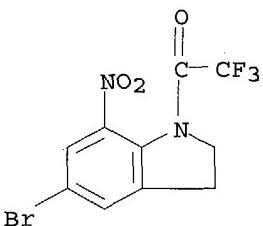
AB Me<sub>3</sub>CO<sub>2</sub>C-Gly-Val-Bni (I, Bni = 5-bromo-7-nitro-4-indolyl) and Me<sub>3</sub>CO<sub>2</sub>C-Leu-Ala-Bni (II) were prep'd. in 45-50% yields. Indoline was treated with Me<sub>3</sub>CO<sub>2</sub>CNHCHRCO<sub>2</sub>H (R = Me, CHMe<sub>2</sub>) to give Me<sub>3</sub>CO<sub>2</sub>CNHCHRCOR<sub>1</sub> (R<sub>1</sub> = 1-indoliny1) which was treated with CF<sub>3</sub>CO<sub>2</sub>H, brominating, and nitrating to give CF<sub>3</sub>CONHCHRCOBni which was deacylated and coupled with the appropriate amino acid deriv. to give I or II. The photolysis of I and II in aq. CH<sub>2</sub>Cl<sub>2</sub>-dioxane gave 80-1% of Me<sub>3</sub>CO<sub>2</sub>C-Gly-Val-OH and Me<sub>3</sub>CO<sub>2</sub>C-Leu-Ala-OH. The photolysis in PhCH<sub>2</sub>OH gave a mixt. of peptide acid and ester.

IT 66414-97-9 66414-98-0 66414-99-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(photolysis of)

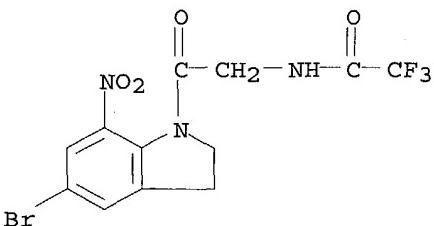
RN 66414-97-9 CAPLUS

CN 1H-Indole, 5-bromo-2,3-dihydro-7-nitro-1-(trifluoroacetyl)- (9CI) (CA INDEX NAME)



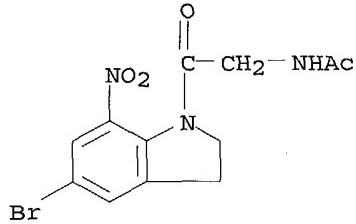
RN 66414-98-0 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)



RN 66414-99-1 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-2-oxoethyl]- (9CI) (CA INDEX NAME)



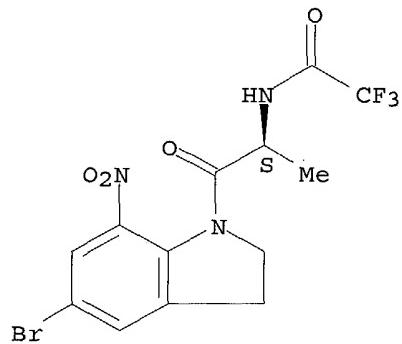
IT 66414-92-4P 66517-34-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and deacylation of)

RN 66414-92-4 CAPLUS

CN Acetamide, N-[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-oxoethyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

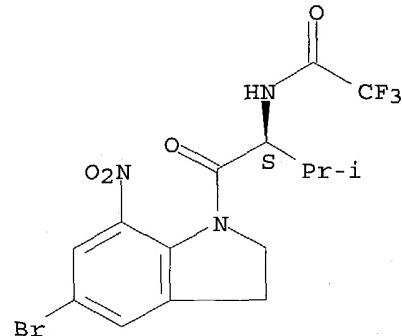
Absolute stereochemistry.



RN 66517-34-8 CAPLUS

CN Acetamide, N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-2,2,2-trifluoro-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 66414-93-5P 66414-94-6P 66415-03-0P

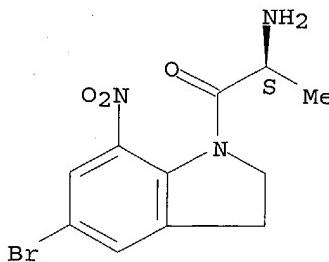
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and peptide coupling with)

RN 66414-93-5 CAPLUS

CN 1H-Indole, 1-(2-amino-1-oxopropyl)-5-bromo-2,3-dihydro-7-nitro-, (S)-

(9CI) (CA INDEX NAME)

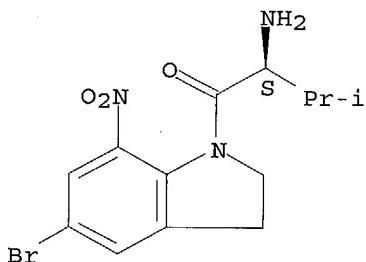
Absolute stereochemistry.



RN 66414-94-6 CAPLUS

CN 1H-Indole, 1-(2-amino-3-methyl-1-oxobutyl)-5-bromo-2,3-dihydro-7-nitro-,  
(S)- (9CI) (CA INDEX NAME)

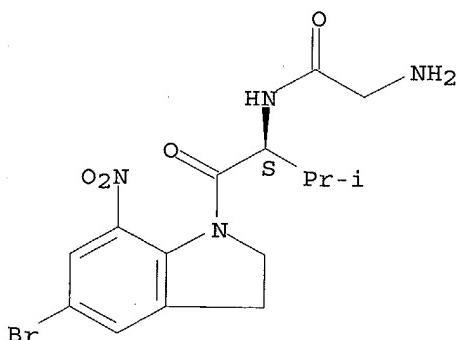
Absolute stereochemistry.



RN 66415-03-0 CAPLUS

CN Acetamide, 2-amino-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



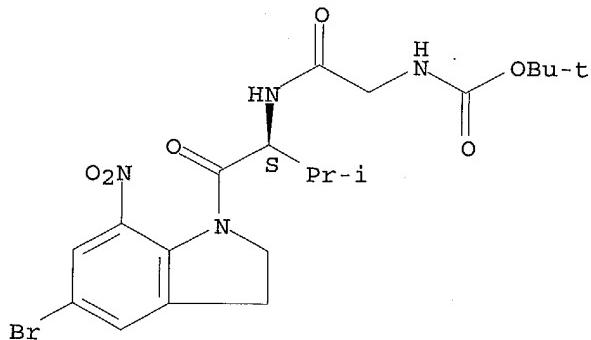
IT 66414-95-7P 66414-96-8P 66415-04-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and photolysis of)

RN 66414-95-7 CAPLUS

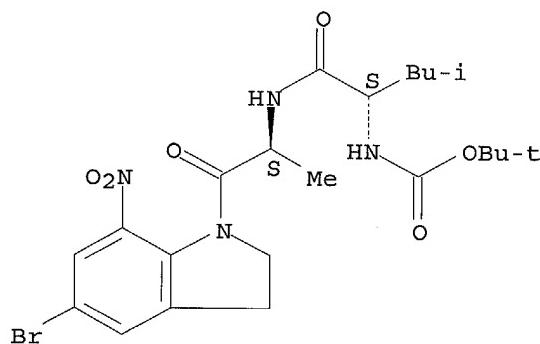
CN Carbamic acid, [2-[[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester,  
(S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

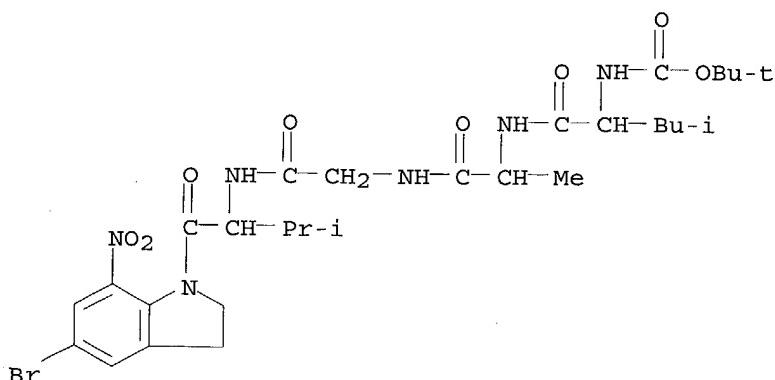


RN 66414-96-8 CAPLUS  
CN Carbamic acid, [1-[[[2-(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)-1-methyl-2-oxoethyl]amino]carbonyl]-3-methylbutyl]-, 1,1-dimethylethyl ester, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 66415-04-1 CAPLUS  
CN Glycinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl-L-alanyl-N-[1-[(5-bromo-2,3-dihydro-7-nitro-1H-indol-1-yl)carbonyl]-2-methylpropyl]-, (S)- (9CI) (CA INDEX NAME)



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=> LOG Y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	95.99	244.35
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-12.37	-12.37

STN INTERNATIONAL LOGOFF AT 10:21:27 ON 13 AUG 2003